Appendix to the

DIABETES MELLITUS COORDINATING COMMITTEE

Sixth Annual Report to the Director
National Institutes of Health
Fiscal Year 1979

U.S. Department of Health and Human Services
Public Health Service
National Institutes of Health

HE 20.3028:

Appendix to the

DIABETES MELLITUS COORDINATING COMMITTEE

Sixth Annual Report to the Director
National Institutes of Health
Fiscal Year 1979

NEWARK PUBLIC LIBRARY

DEC 11 1980

U. S. GOVT. PUBS.
DEPOSITORY 376

NIH Publication No. 80-2244

U.S. Department of Health and Human Services
Public Health Service
National Institutes of Health

Public Law 93-354
National Diabetes Mellitus Research and Education Act

Sec. 5 (a) Part D of Title IV of the Public Health Service Act is amended by adding at the end thereof the following new section:

Diabetes Mellitus Coordinating Committee

"Sec. 436. For the purpose of —

"(1) better coordination of the total National Institutes of Health research activities relating to diabetes mellitus and

"(2) coordinating those aspects of all Federal health programs and activities relating to diabetes mellitus to assure the adequacy and technical soundness of such programs and activities and to provide for the full communication and exchange of information necessary to maintain adequate coordination of such programs and activities,

the Director of the National Institutes of Health shall establish a Diabetes Mellitus Coordinating Committee. The Committee shall be composed of the Directors (or their designated representatives) of each of the Institutes and divisions involved in diabetes-related research and shall include representation from all Federal departments and agencies whose programs involve health functions or responsibilities as determined by the Secretary. The Committee shall be chaired by the Director of the National Institutes of Health (or his designated representative). The Committee shall prepare a report as soon after the end of each fiscal year as possible for the Director of the National Institutes of Health detailing the work of the Committee in carrying out the coordinating activities described in paragraphs (1) and (2)."

CONTENTS

Page

Introduction 1

Project Listings 13

Resources 13
Etiologic Factors 16
Nutrition, Exercise, and Obesity 22
Hormones 29
Intermediary Carbohydrate and Protein Metabolism 54
Transplantation and Artificial Devices 70
Nonhormonal Blood Factors, Platelets, and Coagulation . . . 75
Lipid Metabolism, Lipoproteins, Cholesterol, and Triglycerides 79
Pancreas and Islet Cell Studies 90
Microangiopathy 92
Macroangiopathy 97
Heart and Circulation 102
Central and Peripheral Nervous System 110
Nephropathy 117
Ocular Complications 122
Dental Complications 136
Infections 138
Pregnancy and Perinatal Problems 145
Psychosocial and Behavioral Problems 150
Pharmacologic Agents 153
Epidemiology 157
Health Services 163
Health Care Delivery 165
Manpower Development and Professional Education 168
Multidisciplinary Programs 184
Workshops, Conferences, and Publications 188
Unclassified 190

READEX
FICHE

INTRODUCTION

Background

Each agency (or agency component) represented on the Diabetes Mellitus Coordinating Committee (DMCC) provides, annually, brief descriptions of its diabetes-related programs. Where practical and appropriate, these reports include tabulations of discrete diabetes-related projects or resources within these programs--i.e., specific activities being conducted, sponsored, or otherwise fostered by the agency.

The following information is provided for each project:

- DMCC category
- Project number
- Project title
- Name and location of the Principal Investigator or performing organization
- Funding for the reporting period.

Funding levels reported may be estimates if exact fiscal data are not readily available. If only a portion of a reported activity is diabetes-related, the appropriate portion of the total funding of the activity is indicated wherever possible. Double reporting of costs--i.e., inclusion of a single activity and its total costs in two or more different tabulations--has been avoided in the FY 1979 report, although in previous reports such reporting was footnoted.

Explanation of Graphics

Preceding each project listing under any DMCC subject category is a bar graph displaying the funding and project level trends over a 4-year period (FY 1976 - FY 1979).

In some cases, funding levels were not submitted. For example, the Veterans' Administration submits only project listings because individual project funding cannot be separated from the gross intramural funds. Since the revised FY 1979 DMCC categories differ slightly from the previous two fiscal years, the project lists have been adjusted to ensure congruence in the graphic presentations.

Any additional information peculiar to the particular bar graph appears as footnotes.

Categories and Subjects

Activities identified as being related to diabetes are assigned to categories depending upon the relationship of the activity to diabetes mellitus. This classification is made by the reporting agency. Diabetes-related activities are categorized according to the specific area of the research or activity within the field being pursued. These categories are useful in assessing the programmatic balance among various topics. The major subjects and subtopics adopted by the DMCC for reporting FY 1979 diabetes-related activities are as follows:

A. Epidemiology (See B21)

B. Research

1. Resources
2. Etiologic Factors including genetic, immunologic, infectious, and other factors relating to the cause of diabetes
3. Nutrition, Exercise, and Obesity
4. Hormones
5. Intermediary Carbohydrate and Protein Metabolism
6. Transplantation and Artificial Devices
7. Nonhormonal Blood Factors, Platelets, and Coagulation
8. Lipid Metabolism, Lipoproteins, Cholesterol, and Triglycerides
9. Pancreas and Islet Cell Studies
10. Microangiopathy
11. Macroangiopathy
12. Heart and Circulation
13. Central and Peripheral Nervous System
14. Nephropathy
15. Ocular Complications
16. Dental Complications
17. Infections

18. Pregnancy and Perinatal Problems

19. Psychosocial and Behavioral Problems

20. Pharmacologic Agents

21. Epidemiology

22. Health Services

C. Health Care Delivery

1. Health Care Facilities and Equipment

2. Health Care Services

3. Social Adjustment and Mental Health Services

4. Public Education

5. Patient Education

6. Quality Assurance

7. Health Care Financing

8. Health Planning and Evaluation

D. Manpower Development and Professional Education

1. General

2. Career Awards

3. Fellowships and Training Programs

E. Multidisciplinary Programs

1. Diabetes Research Centers

2. Diabetes Research and Training Centers

3. General Clinical Research Centers

4. Other Multidisciplinary Programs

F. Workshops, Conferences, and Publications

G. Unclassified

The FY 1979 categories and subjects differ from the previous two fiscal years for these reasons:

- Epidemiology is now classified as B 21;
- Etiologic factors (B 2) combines B 2 and most of B 4 from the old classification;
- Hormones (B 4) combines some B 5 and B 21 from the old classification;
- Intermediary carbohydrates and protein metabolism combines some B 5 and B 21 from the old classification;
- The old B 6 is now split into B 6 and B 9;
- Health care delivery now has eight subtopics rather than the previous four; and
- Under manpower, fellowships and training programs are combined as a subtopic in the new classification.

National Institutes of Health (NIH) Project Coding

Many of the research projects identified in this report are sponsored by the National Institutes of Health. NIH uses a grant or contract identification number made up of several parts, each having a distinct meaning, to identify each project. Complete information concerning the grant and contract identification system of NIH is provided in "Activity Codes, Organizational Codes, and Definitions Used in Extramural Programs," NIH Manual Issuance 4101, from which the following information is taken.

Grant Identification Number

Those elements of the grant identification number used in this report and of interest to the reader are described as follows:

Activity Code	Administering Organization	Serial Number	Suffixes	
			Grant Year	Other
R01	AM	15019	-09	S1

Activity Code:

A three-digit code identifying general categories of grant activity. Codes most commonly used in diabetes-related research include:

F06 Special emphasis senior international fellowships in diabetes mellitus (awarded jointly by the National Institute of Arthritis, Metabolism, and Digestive Diseases and the Fogarty International Center) are given to "outstanding mid-career faculty members of U.S. biomedical or graduate-level educational institutions to pursue research and study in Diabetes Mellitus or related areas at foreign host institutions."

F32 Postdoctoral individual national research service award, providing "postdoctoral research training to individuals to broaden their scientific background and extend their potential for research in specified health-related areas."

K01 Research Scientist Development Award--Research and Training "for support of a scientist, committed to research, in need of both advanced research training and additional experience."

K04 Modified research career development award, given to "foster the development of young scientists with outstanding research potential for careers of independent research in the sciences related to health."

K06 Research career awards, made "to enable institutions to finance positions favorable to the intellectual growth and research productivity of established investigators of high competence."

K07 Academic investigator awards, given to "create and encourage a stimulating approach to disease curricula."

K08 Teacher investigator award, which provides "the opportunity for promising medical scientists...or faculty members who will pursue research aspects of categorical areas applicable to the awarding unit" (in this case, diabetes).

P01 Research Program Projects provides "support of a broadly based, multidisciplinary, often long term research program which has a specific major objective or a basic theme. A program project generally involves the organized efforts of relatively large groups, members of which are conducting research projects designed to elucidate the various aspects or components of this objective."

P30 Center core grants, provided to "support shared resources and facilities for categorical research by a number of investigators from different disciplines who provide a multi-disciplinary approach to a joint research effort or from the same discipline who focus on a common research problem."

P50 Specialized centers are created to "support any part of the full range of research and development from very basic to clinical.... These grants differ from program project grants in that they are usually developed in response to an announcement of the programmatic needs of an Institute or Division and receive continuous attention from its staff."

P60 Comprehensive centers are "multipurpose units designed to bring together into a common focus divergent but related activities within a given community."

R01 Traditional projects are identified by the letter "R". Such funds identified by this code support "a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing his specific interest and competencies."

R10 Cooperative Clinical Research--"to support clinical evaluation of various methods of therapy in specific disease areas. These are usually collaborative programs between sponsoring institutions and principal investigators, and usually conducted under a formal protocol."

R13 This generally refers to projects listed under national or international workshops, conferences, and publications.

R23 Young, New, and Special Investigator Awards--"to support basic and clinical studies so that newly trained investigators remain active during the developmental stage of their career."

T32 Institutional national research service awards, given to "enable institutions to make to individuals selected by the National Research Service Awards for predoctoral and postdoctoral research training."

Y01 Interagency and Intra-agency agreements.

Z01 Intramural research projects carried out by NIH.

Administering Organization

This two-letter code identifies the first major level subdivision responsible for carrying out the project such as "HL" to identify NHLBI projects. The funding agency for each diabetes-related project, which is generally the same as the administering agency, is identified below.

National Institutes of Health (NIH)

AG	National Institute on Aging (NIA)
AI	National Institute of Allergy and Infectious Diseases (NIAID)
AM	National Institute of Arthritis, Metabolism, and Digestive Diseases (NIAMDD)
CL	Clinical Center (CLC)
CT	Division of Computer Research and Technology (DCRT)
DE	National Institute of Dental Research (NIDR)
ES	National Institute of Environmental Health Sciences (NIEHS)
EY	National Eye Institute (NEI)
GM	National Institute of General Medical Sciences (NIGMS)
HD	National Institute of Child Health and Human Development (NICHD)
HL	National Heart, Lung, and Blood Institute (NHLBI)
HV *	Division of Heart and Vascular Diseases (NHLBI)
HB *	Division of Blood Diseases and Resources (NHLBI)
HR *	Division of Lung Diseases (NHLBI)
HI *	Division of Intramural Research (NHLBI)
HO *	Office of the Director (NHLBI)
NS	National Institute of Neurological and Communicative Disorders and Stroke (NINCDS)
RG	Division of Research Grants (DRG)
RR	Division of Research Resources (DRR)
RS	Division of Research Services (DRS)
TW	Fogarty International Center (FIC)

Health Resources Administration (HRA)

MB	Office of the Bureau of Health Manpower Director (BHM)
AH	Division of Associated Health Professions (DAHP-BHM)
DH	Division of Dentistry
NU	Division of Nursing (DNU-BHM)
PE	Division of Medicine (DM-BHM)

Food and Drug Administration (FDA)

FD	Food and Drug Administration (FDA)

Center for Disease Control (CDC)

CC	Center for Disease Control (CDC)
OH	National Institute for Occupational Safety and Health (NIOSH)

Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA)

AA	National Institute on Alcohol Abuse and Alcoholism (NIAAA)
DA	National Institute on Drug Abuse (NIDA)
MH	National Institute of Mental Health (NIMH)

---

* Applicable to contracts only.

Office of Health Research, Statistics and Technology (OHRST)

HS	National Center for Health Services Research (NCHSR)
HT	National Center for Health Care Technology (NCHCT)

Serial Number

The serial number serves as an internal identifier for the project; this five-digit number is generally assigned sequentially within a Bureau, Institute, or Division.

Suffixes

A suffix at the end of the grant number indicates:

Grant Year -- A two-digit number indicating the number of years in which a project has been active.

Supplement -- The letter "S" and related number identify a particular supplemental award. Supplemental awards are noncompetitive awards providing extra funds to an existing project.

Amendment -- The letter "A" and related number identify each amended application. Amendment designations follow the grant year or the supplement designation, as appropriate.

Contract Identification Number

Generally, NIH contract identification numbers are constructed in a manner similar to grant identification numbers. Of interest to readers of this report is the activity code: the digits "N01" in the activity code indicate NIH research project contracts.

Federal Expenditures for Diabetes-Related Activities

Federal expenditures for diabetes-related activities have expanded over the past 4 fiscal years. During FY 1979, total Federal funding reported to the DMCC for diabetes-related activities reached more than $128 million. Although this is an increase over the $115 million reported in FY 1978, it appears very modest when compared to the 115 percent increase reported between FY 1976 and FY 1978.

Information concerning Federal support for diabetes activities during FY 1979 is given by category of activity in table 1. Table 2 provides funding totals by category for each of the Federal agencies reporting. For each category of activity, bar graphs describing total funding by

agency over a 4-year period have been provided preceding the project listings for that category. Narrative summaries and discussions of noteworthy activities have been provided in the body of this report.

Table 1.—Total Federal diabetes-related activities by diabetes subtopics: FY 1979

Diabetes Subtopic	Funds
A. Epidemiology (see B 21)	
B. Research	
1. Resources	$ 2,369,451
2. Etiologic Factors including genetic, immunologic, infectious, and other factors relating to the cause of diabetes	5,566,665
3. Nutrition, Exercise, and Obesity	8,454,359
4. Hormones	19,330,805
5. Intermediary Carbohydrate and Protein Metabolism	11,934,133
6. Transplantation and Artificial Devices	4,688,831
7. Nonhormonal Blood Factors, Platelets, and Coagulation	1,582,179
8. Lipid Metabolism, Lipoproteins, Cholesterol, and Triglycerides	10,624,521
9. Pancreas and Islet Cell Studies	370,081
10. Microangiopathy	2,278,834
11. Macroangiopathy	1,324,148
12. Heart and Circulation	3,862,747
13. Central and Peripheral Nervous System	3,346,661
14. Nephropathy	1,635,040
15. Ocular Complications	15,482,911
16. Dental Complications	658,252
17. Infections	1,178,171
18. Pregnancy and Perinatal Problems	4,254,662
19. Psychosocial and Behavioral Problems	1,346,194
20. Pharmacologic Agents	1,910,733
21. Epidemiology	3,405,269
22. Health Services	3,000*
Subtotal - Research	**$105,607,647**
C. Health Care Delivery	
1. Health Care Facilities and Research	439,529
2. Health Care Services	1,157,928
3. Social Adjustment and Mental Health Services	439,529
4. Public Education	440,529
5. Patient Education	440,529
6. Quality Assurance	440,529
7. Health Care Financing	440,529
8. Health Planning and Evaluation	
Subtotal - Health Care Delivery	**$ 3,358,573**
D. Manpower Development and Professional Education	
1. General	2,492,325
2. Career Awards	4,508,028
3. Fellowships and Training Programs	
Subtotal - Manpower Development and Professional Education	**$ 7,000,353**
E. Multidisciplinary Programs	**$ 12,020,997**
F. Workshops, Conferences, and Publications	**$ 175,125**
G. Unclassified	**$ 298,124**
TOTAL**	**$128,460,819**

* *Funding amounts for CDC, NCHS, and VA were not provided for inclusion.*

** *Includes some diabetes related intramural funds.*

Table 2.—FY 1979 diabetes-related funding by subject area and agency ($ thousands)[a]

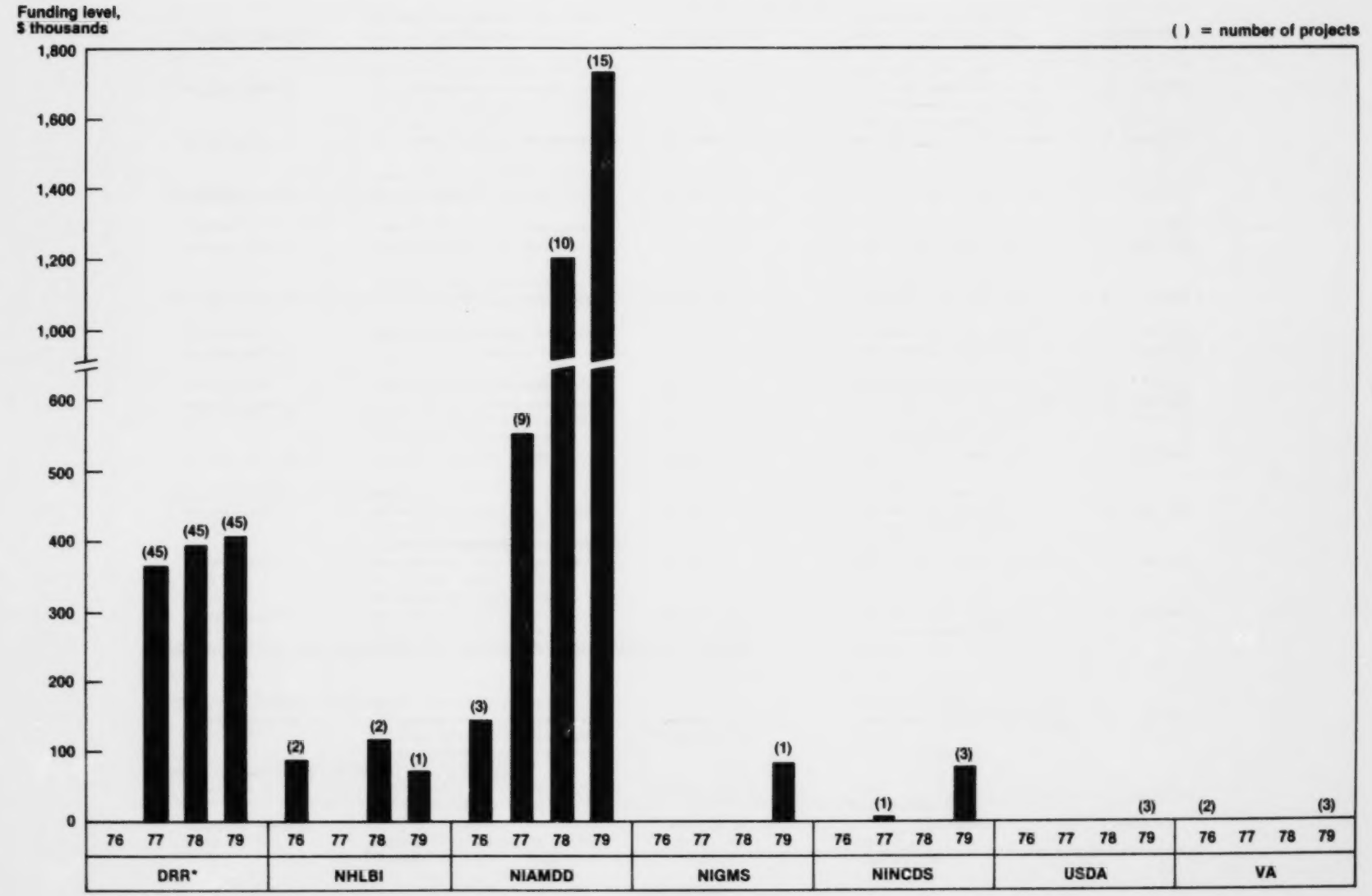
	ADAMHA	CDC[b]	DRR	FDA	HRA	NCHS	NEI	NHLBI	NIA	NIAID	NIAMDD	NICHD	NIDR	NIEHS	NIGMS	NINCDS	USDA	VA
A. Epidemiology (see B.21)																		
B. Research																		
1. Resources			403					72			1,734				81	79	X	X
2. Etiologic Factors including genetic, immunologic, infectious, and other factors relating to the cause of diabetes			369				270	14		1,293	2,631	368	420	100	101		X	X
3. Nutrition, Exercise, and Obesity			2,281						159		3,873	1,190	90			201	660	X
4. Hormones	274		1,781	18				440	852	215	15,590	78			82		X	X
5. Intermediary Carbohydrate and Protein Metabolism			274						109		8,809	815			509	1,219	199	X
6. Transplantation and Artificial Devices			114					83		18	4,262	43			168			X
7. Nonhormonal Blood Factors, Platelets, and Coagulation			40					1,191			351							
8. Lipid Metabolism, Lipoproteins, Cholesterol, and Triglycerides			417					3,776	158		6,043	53			164	13		X
9. Pancreas and Islet Cell Studies									50	22	298							
10. Microangiopathy			65				104	1,375			582		110			42		X
11. Macroangiopathy			16					909	140							259		X
12. Heart and Circulation			64					3,671			101				26			X
13. Central and Peripheral Nervous System			111					172			902		70			2,091		X
14. Nephropathy			126					121		126	1,262							X
15. Ocular Complications			18				15,235	229										X
16. Dental Complications			13										645					X
17. Infections			72							1,009	97							X
18. Pregnancy and Perinatal Problems			605					385			632	2,632					X	
19. Psychosocial and Behavioral Problems	190		196					411			549							X
20. Pharmacologic Agents	X		1,008					21			794				87			X
21. Epidemiology		X				X	468	1,324			1,538				75		X	X
22. Health Services		X	3			X												X
Subtotal	**464**		**7,975**	**18**			**16,077**	**14,194**	**1,468**	**2,683**	**50,046**	**5,179**	**1,335**	**100**	**1,293**	**3,904**	**859**	
C. Health Care Delivery																		
1. Health Care Facilities and Research																		
2. Health Care Services		440				X												
3. Social Adjustment and Mental Health Services																		
4. Public Education		441	378								339							
5. Patient Education		440																
6. Quality Assurance		441																
7. Health Care Financing		441				X												
8. Health Planning and Evaluation		441																
Subtotal		**2,644**	**378**								**339**							
D. Manpower Development and Professional Education																		
1. General																		
2. Career Awards							157	241		41	2,053							
3. Fellowship and Training Programs	36				354		74	67		12	3,952	13						
Subtotal	**36**				**354**		**231**	**308**		**53**	**6,005**	**13**				**264**		
E. Multidisciplinary Programs											**9,143**	**2,615**						
F. Workshops, Conferences, and Publications											**175**							
G. Unclassified											**200**				**94**			
TOTAL FY 1979 FUNDING	**500**	**2,644**	**8,354**	**18**	**354**	**X**	**16,308**	**14,502**	**1,468**	**2,736**	**65,910**	**7,807**	**1,335**	**100**	**1,387**	**4,168**	**859**	**X**

[a] Entries are inexact due to rounding of individual project amounts. X indicates activity reported but no funding data provided.

[b] CDC diabetes control demonstration projects cross cut reporting categories B.21.22, C.2, and C.4.8.

[c] May include some diabetes related intramural funds.

Resources (B 1)



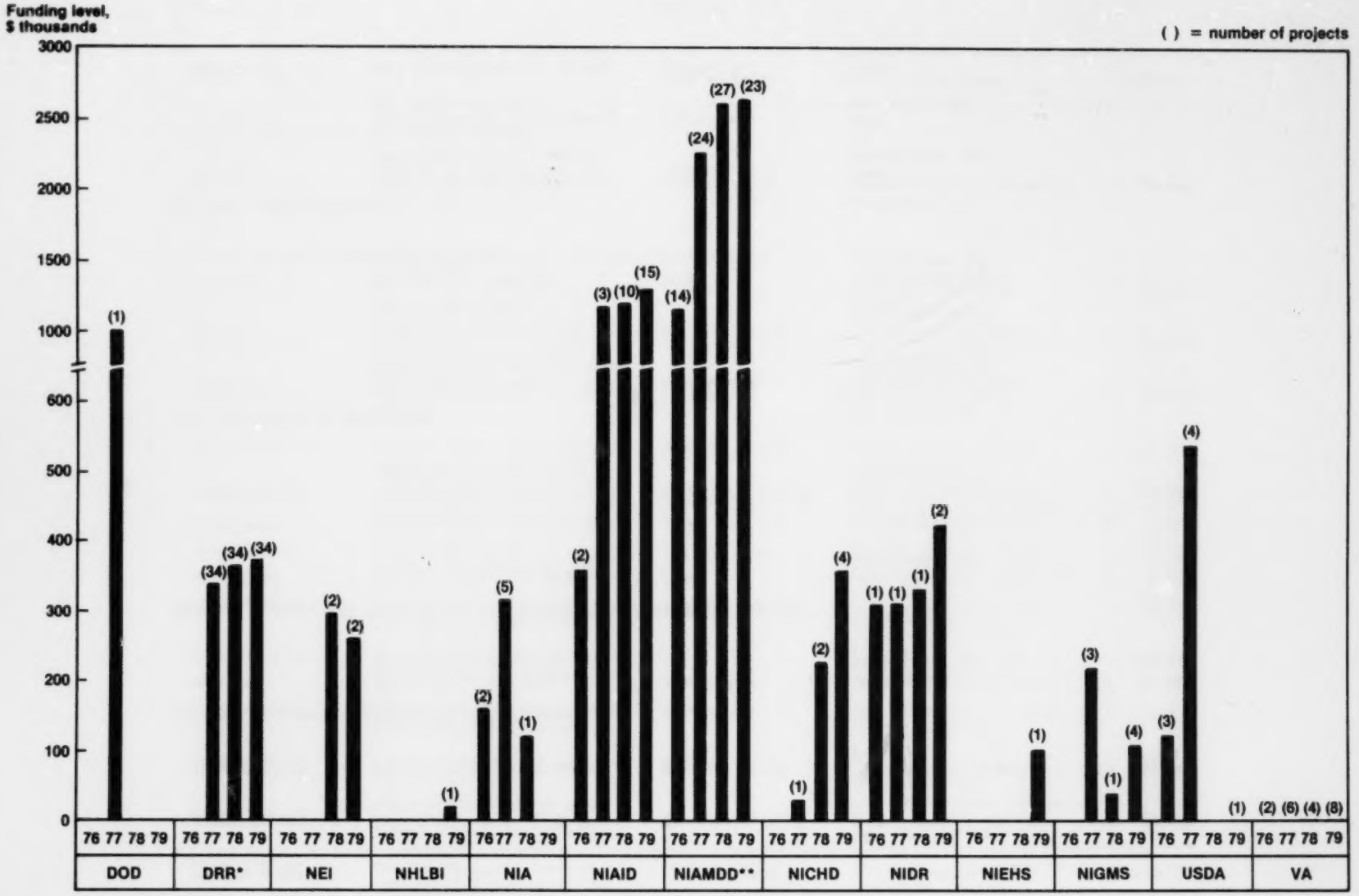
*DRR provided data for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
P01HL06835-18	Cardiovascular Diseases and Blood Pressure Control	Bumpus, F. M.	Cleveland Clinic Hospital Cleveland, OH	$ 70,669
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM25478-01	The Guinea Pig Model of Spontaneous JOD	Barger, B. O.	Alabama University Birmingham, AL	$ 42,220
R01AM26733-01	Spontaneous Rat Diabetes--Pathogenesis and Treatment	Barker, C. F.	Penn. Univ. Med. School Philadelphia, PA	$ 99,788
R01AM14461-10	Hereditary Diabetes in the Mouse	Coleman, D. L.	Jackson Laboratory Bar Harbor, ME	$ 70,734
P01AM21933-02	Chinese Hamster Program Project	Grodsky, G. M.	Calif. Univ. Med. Sch. San Francisco, CA	$ 691,544
R01AM21982-02	Islet Amyloid and Diabetes in Aging Monkeys and Man	Howard, C. F., Jr.	Med. Res. Fdn. of Oregon Portland, OR	$ 51,860
R01AM20462-03	A New Animal Model of Inherited Diabetes Mellitus	Kramer, J. W.	Washington State Univ. Pullman, WA	$ 77,631
R01AM21146-02	Diabetic Hypertensive Rats--Pharmacologic Reactivity	Levy, J. V.	Institute of Med. Sci. San Francisco, CA	$ 79,934
R01AM19155-05	Ultrastructural and Physiologic Studies of Diabetes	Like, A. A.	Mass. Univ. Med. Sch. Worcester, MA	$ 230,200
R01AM25403-02	Factors Affecting Chemically Induced Murine Diabetes	Maclaren, N. K.	Florida Univ. Med. Coll. Gainesville, FL	$ 71,209
R01AM25371-01	The Spontaneously Diabetic "BB" Wistar Rat	Marliss, E. B.	Toronto Univ. Med. Sch. Toronto, Canada	$ 45,540
R01AM21206-03	Development of a Swine Maturity Onset Diabetes Model	Phillips, R. W.	Colorado State Univ. Fort Collins, CO	$ 70,929
R01AM21228-02	Metabolism of Low Insulin Responding Acomys Cahirinus	Shafrir, E.	Hebrew Univ. Med. Sch. Jerusalem, Israel	$ 38,860
R01AM21239-02	Collagen in Genetically Selected Diabetic Rats	Shoshan, S.	Hebrew Univ. DS Jerusalem, Israel	$ 31,338

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM25888-01	Characterization of Spontaneously Diabetic Wistar Rats	Tannenbaum, G. S.	McGill Univ. Chldn. Hos. Montreal, Quebec, Canada	$ 29,479
R01AM26733-01	Studies of BB Rat Diabetes	Williams, R. M.	Northwestern U. Med. Sch. Chicago, IL	$ 101,873
National Institute of General Medical Sciences				
GM22497	Microtubules and the Mechanism of Secretion	Sherline, P.	Univ. Conn. Health Ctr. Storrs, CT	$ 82,504
National Institute of Neurological and Communicative Disorders and Stroke				
NO1NS80993	Insulin Levels (in Animals)	Gibbs	Gulf South Res. Inst. New Iberia, LA	$ 2,200
NO1CO75380	Insulin Levels (in Animals)	Gibbs	Litton Bionetics, Inc.	$ 1,700
RO1NS14418-01	Regional Hypoxic Response of Adult and Newborn (Dogs)	Greenberg, J. H.	Univ. of Pennsylvania Philadelphia, PA	$ 74,400
U.S. Department of Agriculture				
0076039	Development of Swine Maturity Onset Diabetes Model	Phillips, R. W.	Colorado State Univ. Fort Collins, CO	*
0076053	Miniature Swine as Model for Diabetes Mellitus	Phillips, R. W.	Colorado State Univ. Fort Collins, CO	*
0077221	Spontaneous "Diabetes Mellitus" in the Cat	Yano, B.	Univ. of Minnesota Minneapolis, MN	*
Veterans' Administration				
59829840-1	Studies of Spontaneous Diabetes Mellitus in a Rabbit	Sanders, L.	VAMC Little Rock, AR	*
69136784-5	Radioiodinated Chlorpropamide for Pancreas Studies	Tubis, M.	VAMC Wadsworth, CA	*
6633144-03	Replicative Capacity of Cultivated Diabetic Fibroblasts	Vracko, R.	VAMC Seattle, WA	*

* Funding information not available.

Etiologic Factors (B 2)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

**FY 1976 figures have been adjusted from those included in the third annual report to correct duplicate reporting of HSA/IHS activities funded and also reported by NIAMDD.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Eye Institute				
EY00098-01	Studies of Macular and Tapetoretinal Degenerations	Newsome, D. A.	NEI, NIH Bethesda, MD	$ 168,284
R01EY02455-02	HLA and Genetic Studies in Diabetic Retinopathy	Ramsay, R. C.	Univ. of Minnesota St. Paul, MN	$ 91,885
National Heart, Lung, and Blood Institute				
R01HL15273-07	Metabolism of Pulmonary Surfactant	Balint, J. A.	Albany Medical College Albany, NY	$ 13,829
National Institute of Allergy and Infectious Diseases				
PO1AI13370-03	Genetics of Immune Response. Sub-Immunogenetics--Genetic Mapping of Ir and IgE Regulating Genes	Bias, W.	Good Samaritan Hospital Baltimore, MD	$ 1,537
R01AI10931	Immune Responsiveness and Histocompatibility Type	Bluestein, H.	Univ. of California San Diego, CA	$ 4,063
	Epidemiology and Virology of Insulin Dependent Diabetes	Curlin, G.	NIAID, NIH Bethesda, MD	$ 3,000
RO1AI12507-05	Immunobiology of HLA and Its Clinical Applications (Human)	Duquesnoy, R.	Milwaukee Blood Ctr. Inc. Milwaukee, WI	$ 39,307
PO1AI15353-01	Lymphocyte Biology, the MHC and Immune Regulation. Sub-Murine Antibodies Specific for Heterologous Proteins--Insulin and Proinsulin	Kapp-Pierce, J.	Jewish Hospital St. Louis, MO	$ 38,289
RO1AI13145-04	Stimulation of T Cells	Kontiainen, S.	Univ. of Helsinki, SF-00290 Helsinki 29, Finland	$ 6,689
PO1AI11313-07	Humoral, Cellular and Genetic Mechanisms in Autoimmunity. Sub-Haplotype Spec. T Cell Suppressors of the Mixed Lymphocyte Reaction (Human)	McDevitt, H.	Stanford University Stanford, CA	$ 988

ETIOLOGIC FACTORS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01A107757-13	Genetic Control of the Immune Response (Mice, Rats)	McDevitt, H.	Stanford Univ. Sch. of Med. Stanford, CA	$ 15,899
P01A111313-07	Humoral, Cellular, and Generic Mechanisms in Autoimmunity. Sub-The Relationship between Disease, HLA Type and Immune Response (Human)	McDevitt, H.	Stanford University Stanford, CA	$ 3,951
	Office of Recombinant DNA Activities	Nutter, J.	NIAID, NIH Bethesda, MD	$ 18,800
P01AI11313-07	Humoral, Cellular, and Genetic Mechanisms in Autoimmunity. Sub-Haplotype Spec. T Cell Suppressors of the Mixed Lymphocyte Reaction (Human)	Payne, R.	Stanford University Stanford, CA	$ 2,963
R01AI08899-11	Immunobiological Studies with Cultured Human Lymphocytes	Pressman, D.	Roswell Park Memorial Inst. Buffalo, NY	$ 10,755
Z01A100049	Genetic Control of the Immune Response to Insulin in Diabetes	Rosenthal, A.	NIAID, NIH Bethesda, MD	$1,125,000
R01AI12563-05	HLA-D and Ia-like Antigens in Rheumatoid Arthritis	Stastny, P.	University of Texas Dallas, TX	$ 11,047
R01AI15550-01	Autoimmunity and Sex Hormones in Two New Mouse Strains	Talal, N.	Veterans Admin. Hosp. San Francisco, CA	$ 1,825
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM20729-03	Genetic and HLA Studies in Diabetes Mellitus	Barbosa, J. J.	Minn. Univ. Med. School Minneapolis, MN	$ 96,125
R01AM21095-02	Cell Mediated Immunity in Diabetic Patients	Casey, J. I.	Montefiore Hosp./Med. Ctr. New York, NY	$ 52,403
R01AM21598-02	Studies on the Pathogenesis of Diabetes Mellitus	Cerasi, E.	Hebrew Univ. Med. School Jerusalem, Israel	$ 108,525
R01AM20725-18	Biochemistry of Pigmentation and Inherited Disorders	Coleman, D. L.	Jackson Laboratory Bar Harbor, ME	$ 53,163
R01AM20790-03	Diabetes Models Induced by Viral and Immune Insults	Craighead, J. E.	Vermont Univ. Med. Coll. Burlington, VT	$ 126,368

ETIOLOGIC FACTORS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM00888-24	Long-term Study of Asymptomatic and Future Diabetes	Rajans, S. S.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 120,823
R01AM22028-02	Cellular Markers of Genetic Heterogeneity in Diabetes	Gelehrter, T. D.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 42,849
R01AM25879-01	Immune Function in Experimental Diabetes Mellitus	Handwerger, B. S.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 54,825
N01AM92207	Diabetes and Arthritis in Pima-Maricopa Indian Tribes	Hedrick, H. O.	Gila River Indian Comm. Cl. AZ	$ 36,165
N01AM62221	Pathogenesis of Diabetes Mellitus in the Gila River Indian Community	Houser, H.	Case Western Reserve Univ. Cleveland, OH	0
R01AM19256-03	Etiology of Diabetes Mellitus in Infancy and Childhood	Huang, S.	Maryland Univ. Med. Sch. Baltimore, MD	$ 73,105
R01AM21872-02	Diabetes Heredity and Viral Pancreopathy	Loria, R. M.	Va. Comwlth. U. Med. Coll. Richmond, VA	$ 73,577
R01AM24097-01A1	Diabetes Mellitus: Immunological and Viral Interactions	Loria, R. M.	Va. Comwlth U. Med. Coll. Richmond, VA	$ 29,972
R01AM20520-03	Comparative Studies of Three Forms of Childhood Diabetes	Paulsen, E. P.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 55,085
R01AM18522-04A1	Carbohydrate Metabolism--Infection Interrelationships	Rayfield, E. J.	Mount Sinai Med. Sch. New York, NY	$ 87,505
R01AM212659-02	Diabaetes and Cell-Mediated Immunity	Rodman, H. M.	Case Western Res. Med. Sch. Cleveland, OH	$ 79,710
R01AM25306-02	Experimental Juvenile-Type Diabetes	Rossini, A. A.	Massachusetts U. Med. Sch. Worcester, MA	$ 82,916
R01AM19631-03	The HL-A System and the Genetics of Juvenile Diabetes	Rubinstein, P.	New York Blood Ctr. New York, NY	$ 155,743

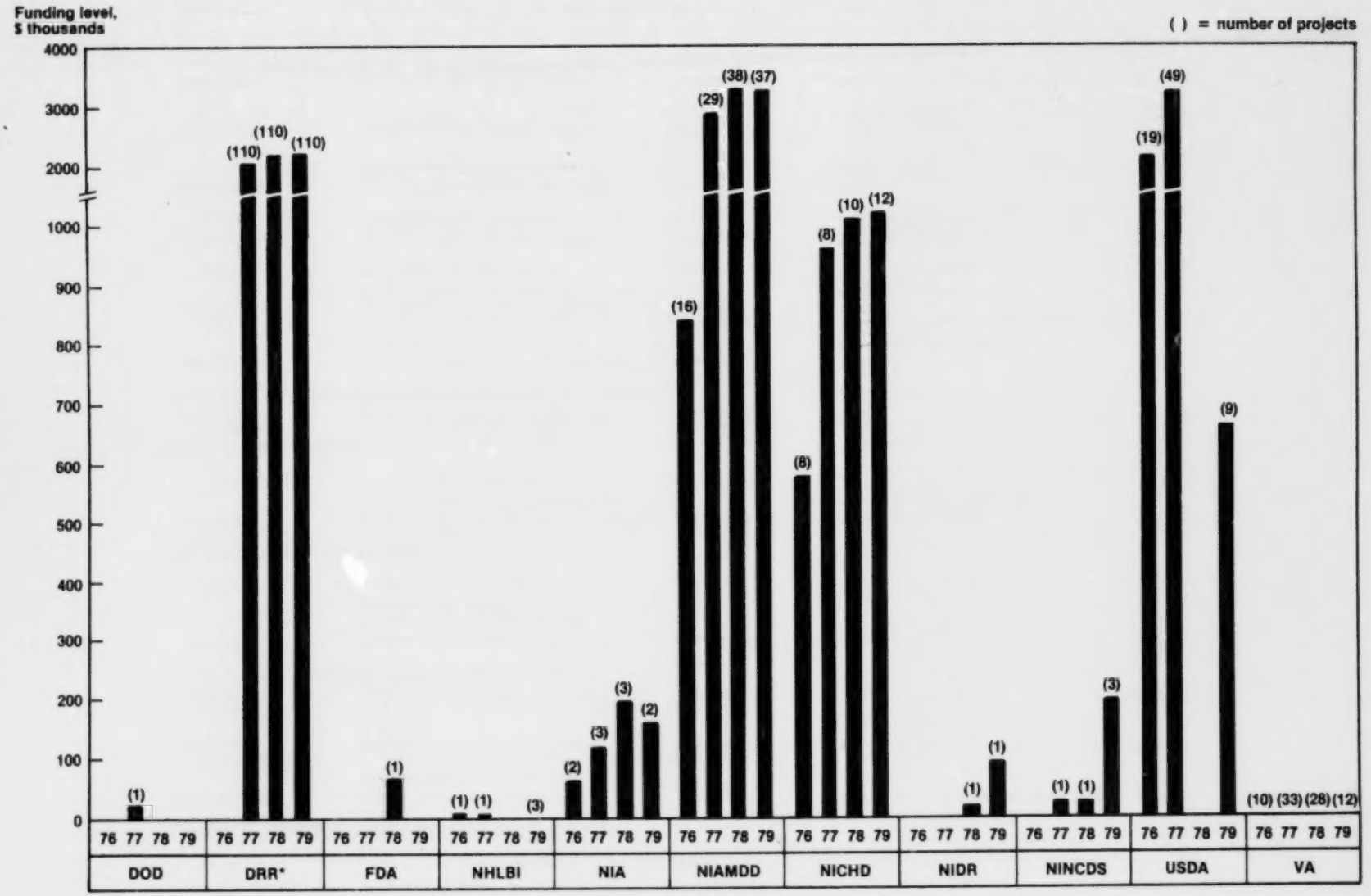
ETIOLOGIC FACTORS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM21213-03	Pancreatic Islet Cell Transformation by SV40 Mutants	Scott, W. A.	Miami Univ. Med. Sch. Coral Gables, FL	$ 41,309
RO1AM26106-01	Studies on Diabetes and Pancreatic Tumors	Shin Seung-Il	Yeshiva U./Einstein Med. New York, NY	$ 58,733
RO1AM25556-01	Genetics of Susceptibility to Diabetes Mellitus	Spielman, R. S.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 81,137
NO1AM62219	Human Diabetes Program	Unger, R. H.	Univ. of Texas Austin, TX	$1,065,460
RO1AM21730-02	Diabetes Mellitus: Rose of Host Genetics and Viruses	Webb, S. R.	Va. Comwlth. U. Med. Col. Richmond, VA	$ 54,778
National Institute of Child Health and Human Development				
NO182846-01	Genetic Linkage Analysis of Juvenile Diabetes Mellitus	Barrcsa, J. J.	Univ. of Minneapolis Minneapolis, MN	$ 263,698
P300522110034	Division of Medical Genetics	Dignan, P.	Children's Hosp. Med. Ctr. Cincinnati, OH	$ 19,718
PO10993805015	Autoantibodies in Asymptomatic Infants and Children	Fudenberg, H. H.	Med. Univ. of S. Carolina Charleston, SC	$ 31,991
K0400307-01	Mathematical Method for Genetics, Epidemiology and Human Population Biology	Lange, K. L.	Univ. of California Los Angeles, CA	$ 39,204
National Institute of Dental Research				
NO1DE92420-01	Search for Diabetogenic Viruses	Dinowitz, M.	NIDR, NIH Bethesda, MD	$ 125,450
ZO1DE00080-05	Virus-Induced Diabetes of the Endocrine and Exocrine Glands	Notkins, A. L.	NIDR, NIH Bethesda, MD	$ 295,301
National Institute of Environmental Health Science				
R01ES1055	Study in Environmental Pharmacology	Kappas, A.	Rockefeller University New York, NY	$ 100,000

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of General Medical Sciences				
NO1GM6-2119	Human Genetic Mutant Cell Repository	Coriell	Institute for Medical Res.	$ 6,000
GM20138	Genetic Variation in Enzyme Activity	Mellman, W. J.	Univ. of Pennsylvania Philadelphia, PA	$ 15,486
GM19100	Genetic and Biochem. Determinants of Diabetic Microangiopathy	Nitowsky, H. M.	Yeshiva University New York, NY	$ 66,195
GM17702	Expression of Human Inherited Diseases in Culture of Differentiated Cells	Seegmiller, J. E.	Univ. of California San Diego, CA	$ 18,700
U.S. Department of Agriculture				
0076902	Nutritional Parameters in Etiology of Diabetes on the Experimental Rat	Molnar, I. G.	Lincoln University Lincoln University, PA	*
Veterans' Administration				
55336472-1	Effect of Zinc Depletion on Endocrine Function in Man	Abbasi, A.	VAMC Allen Park, MI	*
63532747-1	Chromium Deficiency and Glucose Tolerance	Clark, M.	VAMC Oklahoma City, OK	*
61840441-1	Autoimmune Studies in Kindreds with Insulin Dependent Diabetes Mellitus	Doe, R.	VAMC Minneapolis, MN	*
69141884-10	Role of Chromium Deficiency in Pathogenesis of Diabetes	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
52643494-6	Role of Chromium in the Pathogenesis of Diabetes Mellitus	Rose, H.	VAMC Bronx, NY	*
54914932-4	Nature of the Diabetic Lesion	Seltzer, H.	VAMC Dallas, TX	*
54941990-9	Effect of Cellular Deficits of K, Mg and P04 on Control of Diabetes	Seltzer, H.	VAMC Dallas, TX	*
54943659-10	Correction of Cell-Ion Deficits by "Cure" of Diabetes	Seltzer, H.	VAMC Dallas, TX	*

* Funding information not available.

Nutrition, Exercise, and Obesity (B 3)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

NUTRITION, EXERCISE, AND OBESITY

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute on Aging				
P01AG01188-01	Nutritional Probe of the Aging Process	Masoro, E. J.	U. of Texas Hlth. Sci. Ctr. San Antonio, TX	$ 78,890
R01AG0014305	Dietary Factors in Aging	Porta, E. A.	University of Hawaii Honolulu, HI	$ 80,000
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM20889-03	High Carbohydrate and High Fiber Diets for Diabetics	Anderson, J. W.	VAH Lexington, KY	$ 52,691
R01AM21413-02	Cholecystokinin and Feeding in Zucker Obese Rats	Baile, C. A.	Penn. Univ. Vet. Sch. Philadelphia, PA	$ 35,606
Z01AM54017-03DD	Effects of Weight-Reduction on Gluco-Regulatory Hormones	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 109,000
R01AM18560-05	The Ontogeny of Ingestive Behavior	Blass, E. M.	Johns Hopkins University Baltimore, MD	$ 64,364
R01AM15165-09	Clinical and Experimental Study of Obesity	Bray, G. A.	Harbor General Hospial Torrance, CA	$ 102,775
R01AM20494-03	Studies of Human Feeding Behavior	Campbell, R. G.	Rochester Univ. Med. Sch. New York, NY	$ 102,554
R01AM25111-02	Insulin Secretion in Genetic Diabetes and Obesity	Campfield, L. A.	UCLA Engr. Sch. Los Angeles, CA	$ 48,784
R01AM21130-03	Skeletal Muscle Metabolism in Obese-Diabetic Mice	Chan, T. M.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 48,493
R01AM25240-02	Dietary Therapy of Diabetes Mellitus	Crapo, P. A.	Colorado Univ. Med. Sch. Fort Collins, CO	$ 28,198
Z01AM70503-01 EFS	Alterations in Adipose Cell Function in the Aging Rat Model of Obesity	Cushman, S. W.	NIAMDD, NIH Bethesda, MD	$ 32,000
Z01AM70504-01 EFS	Alterations in Adipose Cell Function in the Genetically Obese Zucker Fatty Rat	Cushman, S. W.	NIAMDD, NIH Bethesda, MD	$ 12,000

NUTRITION, EXERCISE, AND OBESITY (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM18535-05	Effects of Over- and Under-nutrition on Thyroid Hormone	Danforth, E., Jr.	Vermont Univ. Med. Coll. Burlington, VT	$ 98,652
R01AM12479-12	Hypothalamic Regulation of Food	Debons, A. F.	SUNY Med. Ctr. NY	$ 47,915
R01AM25307-02	Protein Degradation in Diabetes and Starvation	Dice, J. F., Jr.	Harvard Univ. Med. Sch. Boston, MA	$ 94,278
R01AM19627-03	The Early Development of Obese-Hyperglycemic Mice	Dubuc, P. U.	City of Hope Med. Ctr. Duarte, CA	$ 49,678
R01AM21024-02	Weight-Loss Risk Reduction: Behavioral Techniques	Fisher, E. B., Jr.	Washington Univ. St. Louis, MO	$ 47,094
R01AM20022-03	Energy Metabolism, Hunger, and Feeding	Friedman, M. I.	Massachusetts Univ. Amherst, MA	$ 27,831
R01AM10866-14	CNS Regulation of Fuel Mobilization and Storage	Goodner, C. J.	Washington Univ. Med. Sch. Seattle, WA	$ 91,702
R01AM20493-03	Obesity and the Regulation of Appetite	Hansen, B. W.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 175,204
R01AM18325-15	Metabolic Regulations in Human Obesity	Hirsch, J.	Rockefeller Univ. New York, NY	$ 180,675
R01AM20508-03	Regulation of Adipose Tissue Growth and Development	Hirsch, J.	Rockefeller Univ. New York, NY	$ 136,644
R01AM18986-04	Carbohydrate and Fat Metabolism During Exercise	Holloszy, J. O.	Washington Univ. Med. Sch. St. Louis, IL	$ 76,623
R01AM19821-03	Diet Selection and Obesity	Kanarek, R. B.	Tufts University Medford, MA	$ 21,600
R01AM20683-03	Behavioral and Neuroanatomical Aspects of Food Intake	Kanarek, R. B.	Tufts University Medford, MA	$ 82,079
R01AM18557-05	Early Nutrition--Development of Obesity	Kaplan, M. L.	Rutgers State University New Brunswick, NJ	$ 54,108
R01AM21031-02	Isolated Perfused Intestine: Study of Gut-Islet Axis	Levin, S. R.	UCLA Medical School Los Angeles, CA	$ 46,201

NUTRITION, EXERCISE, AND OBESITY (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM19302-05	Hypothalamus in Feeding Behavior	McHugh, P. R.	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 78,451
R01AM17357-06	Effect of Exercise on Lipid Metabolism	Oscai, L. B.	Ill. U. at Chicago Circle Chicago, IL	$ 44,051
R01AM19876-03	Effect of Diabetes Mellitus on Intestinal Function	Ramaswamy, K.	Texas University Med. Sch. Houston, TX	$ 42,781
R01AM20035-02	Behavioral Biology of Glucoprivic Feeding	Ritter, R. C.	Idaho University Moscow, ID	$ 34,493
R01AM26894-01	Physical Training and Vascular Risk Factors in Diabetics	Schneider, S. H.	Rutgers St. Univ. Med. Sch. Piscataway, NJ	$ 102,387
R01AM10254-14A1	Metabolic Interrelationships of Obesity and Diabetes	Sims, E. A. H.	Vermont Univ. Med. Coll. Burlington, VT	$ 131,236
R01AM10254-13S1	Metabolic Interrelationships of Obesity and Diabetes	Sims, E. A. H.	Vermont Univ. Med. Coll. Burlington, VT	$ 42,578
R01AM18899-05	Physical Activity, Pancreatic Function and Obesity	Stern, J. S.	Calif. U. Davis Agr. Coll. Davis, CA	$ 68,769
R01AM02911-21	Metabolic Aspects of Obesity	Thenen, S. W.	Harv. Univ. Pub. Hlth. Sch. Boston, MA	$ 115,202
R01AM22183-02	Serum Factors and Insulin-Sensitivity in Obesity	Timmers, K. I.	Mt. Sinai Medical School New York, NY	$ 105,382
P50AM26517-03	Obesity Research Center	Van Itallie, T. B.	St. Luke's Inst. Hlth. Sci. New York, NY	$ 669,396
R01AM20384-02	Control of Liver Glycogenolysis During Exercise	Winder, W. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 6,666
R01AM27107-01	Control of Liver Glycogenolysis During Exercise	Winder, W. W.	S. Dakota Univ. Med. Sch. Vermillion, SD	$ 23,920
R01AM17844-05	Insulin and CNS Control of Body Weight and Feeding	Woods, S. C.	Washington Univ. Seattle, WA	$ 58,630

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Child Health and Human Development				
R011210902	Nutrition, Pregnancy, Lactation and Maternal Fat Stores	Brasel, J. A.	Columbia University New York, NY	$ 75,393
R011252001	HCME-Based Behavioral Program for Obese Children	Epstein, L. H.	University of Pittsburgh Pittsburgh, PA	$ 90,298
R0111583-01A1	Genetic and Gestational Influences on Childhood Obesity	Ginsberg-Pellner, F. V.	City Univ. of New York New York, NY	$ 127,442
R011166602	Predicting Outcome in Behavioral Obesity Treatment	Gormally, J. F.	University of Maryland College Park, MD	$ 43,084
R011263702	Nutrition and Adipocyte Growth and Development	Greenwood, M. R.	Vassar College Poughkeepsie, NY	$ 87,973
K040028302	Nutrition and Development of Adipose Tissue	Greenwood, M. R.	Vassar College Poughkeepsie, NY	$ 35,964
P501132702004	Hormone-Cell Interactions in Genetic Obesity	Hayek, A.	University of New Mexico Albuquerque, NM	$ 74,086
R011294702	Metabolic Regulation of Growth and Development	Martin, R. J.	University of Georgia Athens, GA	$ 94,586
R011098702	Effects of Regulation of Appetite in the Newborn	Oscai, L. B.	University of Illinois Chicago, IL	$ 46,635
R011225203	Subcutaneous Fat, Blood Lipids and Health	Roche, A. F.	Wright State University Dayton, OH	$ 359,492
R011291001	Self-Cure of Cigarette Smoking and Obesity	Schachter, S.	Columbia University New York, NY	$ 11,470
Z010013402	Obesity in Children with Prader-Willi Syndrome	Sidbury, J. B.	NICHD, NIH Bethesda, MD	$ 155,106
National Institute of Dental Research				
R01DE05466-01	Biochemical Studies on a Sweetener, SRI Oxime V	Mitoma, C.	SRI International CA	$ 89,577

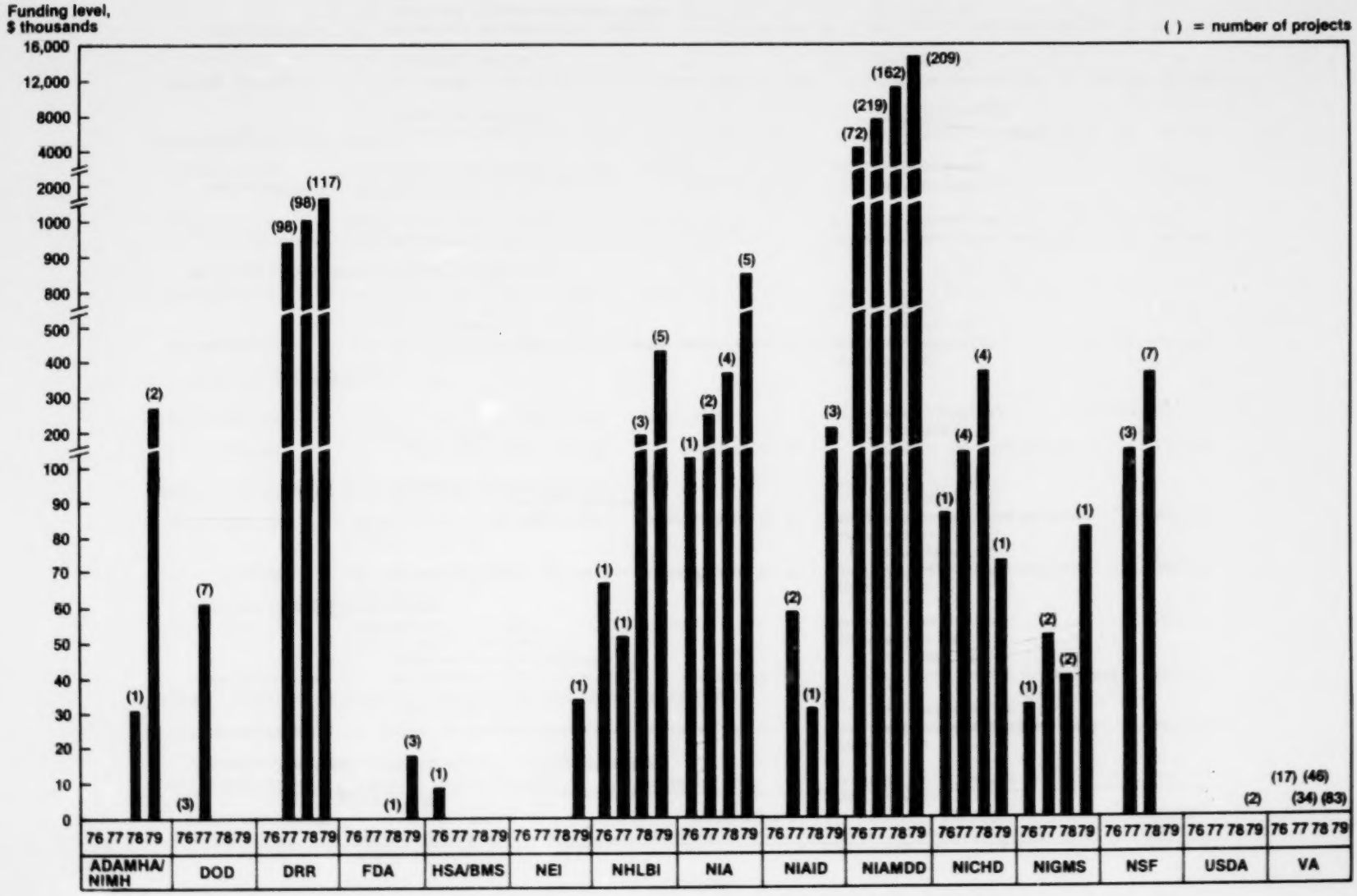
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Neurological and Communicative Disorders and Stroke				
R01NS15174-01	Structural Studies of Taste-Active Molecules	Kim, S. H.	University of California Berkeley, CA	$ 89,300
R01NS07687-12	Hunger, Thirst, and Water Metabolism (Rabbits, Rats)	Novin, D.	University of California Los Angeles, CA	$ 57,200
R01NS15600-01	CNS Abnormalities in Genetically Obese-Diabetic (Mice)	Oltmans, G. A.	Chicago Medical School Chicago, IL	$ 50,100
U.S. Department of Agriculture				
0040703	Chemical Forms and Biological Availability of Chromium in Natural Forms	Anderson, R. A.	Human Nutrition Center	$ 196,820
0042168	Interaction of Age, Sex, and High Sucrose Consumption on Some Parameters in Human Blood and Urine	Behall, K. M.	Human Nutrition Center	$ 141,137
0077566	Influence of Nutrition on Enzyme	Freedland, R. A.	University of California Davis, CA	*
0078226	Influence of Dietary Pyridoxine on Glycogen Metabolism in Normal and Diabetic Animals	Graves, D. J.	Iowa State University Ames, IA	*
0042365	Requirements and Modes of Action of Chromium and Cobalt	Mertz, W.	Human Nutrition Center	$ 196,820
0044944	Desirable Level of Sucrose Intake in Segment of Population Described as Carbohydrate Sensitive	Prather, E. S.	University of Maryland College Park, MD	*
0041962	Effect of Dietary Carbohydrate on Intestinal Digestive and Absorptive Processes	Reiser, S.	Human Nutrition Center	$ 24,906
0043858	Effects of Plant Fiber on Oral Glucose Tolerance Test	Rubenstein, A.	University of Illinois Chicago, IL	*
0042004	Dietary Alteration of Tissue Sensitivity to Insulin	Trout, D. L.	Human Nutrition Center	$ 99,626

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Veterans' Administration				
57839201-3	Comparative Study of the Hines Maintenance Diet and the Caloric Controlled ADA Diet	Abraira, C.	VAMC Hines Chicago, IL	*
59641875-2	High Carbohydrate, High Fiber Diets for Diabetics	Anderson, J.	VAMC Lexington, KY	*
57332820-1	The Role of the Human Brush Border in Digestion and Absorption	Cerda, J.	VAMC Gainesville, FL	*
56141862-1	Liver Abnormalities in Massive Obesity	Gallo, J.	VAMC Orange, NJ	*
64229539-1	Psychophysiology of Energy Balance	Hamilton, C.	VAMC Philadelphia, PA	*
69140430-1	Effect of a High Fiber Diet in Diabetic Out-Patients	Haney, C.	VAMC Wadsworth Los Angeles, CA	*
55442362-1	Mechanism(s) of Insulin Resistance in Obesity	Kolterman, O.	VAMC Denver, CO	*
64034444-1	Effects of Hypercaloric Diet on Lipid and Carbohydrate Metabolism	Olefsky, J.	VAMC Palo Alto, CA	*
60727938-1	Function and Structure of Intestinal Mucosa in Disease	Olsen, W.	VAMC Madison, WI	*
64042466-5	Spontaneous Exercise and Tissue Insulin Sensitivity	Reaven, G.	VAMC Palo Alto, CA	*
69140775-1	Hyperalimentation - Role of Insulin	Stabile, B.	VAMC Wadsworth Los Angeles, CA	*
65036547-1	The Prolonged Effects of High Carbohydrate Diets in Diabetes Mellitus	Toh, S.	VAMC Providence, RI	*

* Funding information not available.

Hormones (B 4)


Funding level, $ thousands
( ) = number of projects
16,000
12,000
8000
4000
2000
1000
900
800
500
400
300
200
100
90
80
70
60
50
40
30
20
10
0
76 77 78 79
ADAMHA/ NIMH
DOD
DRR
FDA
HSA/BMS
NEI
NHLBI
NIA
NIAID
NIAMDD
NICHD
NIGMS
NSF
USDA
VA
(1)
(2)
(3)
(7)
(98)
(117)
(5)
(4)
(72)
(219)
(162)
(209)
(17)
(46)
(34)
(83)

HORMONES

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Alcohol, Drug Abuse, and Mental Health Administration				
RO1MH31908-01	Study of Sexual Dysfunction Among Diabetics	Fink, P. J.	Thomas Jefferson Med. Coll. Philadelphia, PA	$ 149,562
RO1MH27513-04	Psychophysiology of Sexual Function and Dysfunction	Schiavi, R. C.	Mt. Sinai School of Medicine New York, NY	$ 124,091
Food and Drug Administration				
AIC-R-26	Radioimmunoassay of Insulin	Collins, J. F.	FDA/Div. of Drug Biology Washington, DC	$ 3,000
AIC-R-27	Environmental and Other Influences Affecting Insulin Bioassay	Collins, J. F.	FDA/Div. of Drug Biology Washington, DC	$ 6,000
AIC-R-28	Purity Testing of Insulin	Collins, J. F.	FDA/Div. of Drug Biology Washington, DC	$ 9,000
National Eye Institute				
EY00099-01	Search for Diabetic Retinopathy in Acromegaly	Ballintine, E. J.	NEI, NIH Bethesda, MD	$ 33,951
National Heart, Lung, and Blood Institute				
RO1HL22101-03	Hormone-Substrate Interaction in Diabetic Myocyte	Bagby, G. J.	La. State Univ. Med. Ctr. New Orleans, LA	$ 48,605
RO1HL08659-15	Myocardial Performance and Metabolism in the Newborn	Downing, S. E.	Yale University New Haven, CT	$ 125,124
RO1HLO1813-26	Regulation of Metabolism by Drugs and Hormones	Haugaard, N.	University of Pennsylvania Philadelphia, PA	$ 82,732
RO1HL17364-05	Big Renin: Biochemical and Clinical Studies	Luetscher, J. A., Jr.	Stanford University Stanford, CA	$ 16,788
RO1HL20517-04	Diabetes, Somatotropin, Factor VIII and Atherosclerosis	Vander Laan, W. P.	Scripps Cl. and Res. Fdn. La Jolla, CA	$ 164,975

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute on Aging				
P01AG00368-09	Biochemical Regulation of Aging Processes	Adelman, R. C.	Temple University Philadelphia, PA	$ 353,242
R01AG00629-03	Effect of Aging on Levels and Action of Somatomedins	Florin, J. R.	Syracuse University Syracuse, NY	$ 87,904
P01AG00361-20	An Interdisciplinary Program of Research in Aging	Klein, L.	Case Western Reserve Univ. Cleveland, OH	$ 31,000
P01AG01312-01	Endocrinology of Aging	Reaven, G. M.	Stanford University Stanford, CA	$ 179,194
P01AG00599-03	Program Project in Biomedical Aspects of Aging	Rowe, J. W.	Beth-Israel Hospital Brookline, MA	$ 200,988
National Institute of Allergy and Infectious Diseases				
R01AI03771-19	Viral Interference in Carrier Cultures (Mice)	Crowell, R.	Hahnemann Medical Coll. Philadelphia, PA	$ 79,143
R01AI05343-16	Multiplication of Paramyxoviruses	Kingsbury, D.	St. Jude Child. Res. Hosp. Memphis, TN	$ 129,538
R01AI11658-05	Polypeptide Cleavage During EMC Virus Synthesis	Radloff, R.	Univ. of New Mexico Albuquerque, NM	$ 5,160
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM22032-01A1	Is Prolactin Diabetogenic?	Adler, R. A.	Dartmouth Medical School Hanover, NH	$ 72,198
R01AM10188-13	Hormonal Regulation of Metabolism	Altszuler, N.	New York Univ. Med. Sch. New York, NY	$ 136,579
R01AM20948-02	Insulin Action in Liver and Adipose Tissue	Amatruda, J. M.	Rochester Univ. Med. Sch. Rochester, NY	$ 43,939
R01AM20978-02	Aging and Insulin Effects on Cyclic AMP Metabolism	Appleman, M. M.	Univ. of South. California Los Angeles, CA	$ 42,039

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM13441-11	Immunology Structure Site and Action of Insulin	Arquilla, E. R.	California Univ. Med. Sch. Irvine, CA	$ 125,778
RO1AM21250-02	Insulin Receptors and Insulin-Modulated Immune Function	Bar, R. S.	Iowa Univ. Medical Coll. Iowa City, IA	$ 44,912
RO1AM25421-01	Action of Insulin and Growth Peptides on Endothelium	Bar, R. S.	Iowa Univ. Medical Coll. Iowa City, IA	$ 39,100
RO1AM19223-03	Hormone Synthesis and Secretion in Anglerfish Islets	Bauer, G. E.	Minnesota Univ. Med. School Minneapolis, MN	$ 41,269
RO1AM24090-02	Insulin Synthesis and Release by Rat-Islet Adenomas	Bauer, G. E.	Minnesota Univ. Med. School Minneapolis, MN	$ 34,599
RO1AM19488-03	Regulation of Insulin Secretion by the Pituitary	Beloff-Chain, A.	Imperial College London, England	$ 23,824
RO1AM18905-05	Relation of Protein Phosphorylation to Insulin Action	Benjamin, W. B.	State Univ. of New York Stony Brook, NY	$ 61,299
RO1AM25661-02	Regulation of Adipocyte Insulin Sensitivity	Bernstein, R. S.	St. Luke's Hospital Center New York, NY	$ 125,244
RO1AM18958-03	Experimental Studies of Glucagon	Besch, H. R., Jr.	Indiana Univ. Med. School Indianapolis, IN	$ 51,215
RO1AM18903-04A1	Pathogenesis of Diabetes Mellitus	Blackard, W. G.	Va. Cmnwlth. U. Med. Coll. Richmond, VA	$ 91,75
RO1AM05475-18	Mechanisms of Actions of Hormones and Cyclic Nucleotides	Blecher, M.	Georgetown Univ. Med. Sch. Washington, DC	$ 97,493
RO1AM21203-01S1	Somatostatin Secretion in Diabetes	Boyd, A. E.	Baylor Coll. of Medicine Houston, TX	$ 12,820
RO1AM21203-02	Somatostatin Secretion in Diabetes	Boyd, A. E.	Baylor Coll. of Medicine Houston, TX	$ 38,462
RO1AM21203-03	Somatostatin Secretion in Diabetes	Boyd, A. E.	Baylor Coll. of Medicine Houston, TX	$ 52,938
RO1AM21664-03	Control of Basal Insulin Secretion in Man	Brodows, R. G.	Rochester Univ. Med. School Rochester, NY	$ 53,599
RO1AM20050-03	Plasma Inhibitors of Insulin Protease	Brush, J. S.	Puerto Rico Univ. Med. Sch. San Juan, PR	$ 34,802

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM25900-01	Regulation of Glucagon Secretion	Burr, I. M.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 60,015
RO1AM02001-22	Factors that Modify Insulin Action	Buse, M. G.	S. Carolina Univ. Med. Sch. Charleston, SC	$ 95,107
R23AM25761-01	Insulin Effects on Muscle Cell Phosphopeptides	Bush, M.	California Univ. Med. Sch. Los Angeles, CA	$ 39,300
RO1AM25364-01	Insulin Action and Cyclic AMP Turnover	Butcher, R. W.	Mass. Univ. Med. Sch. Worcester, MA	$ 54,771
RO1AM15191-10	Physiology, Pathology, and Biochemistry of Diabetes	Cahill, G. F., Jr.	Joslin Diabetes Fdn. Inc. Boston, MA	$ 381,407
RO1AM11854-12	Subcellular Effects of Metabolic Hormones on Rat Liver	Cardell, R. R., Jr.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 5,120
RO1AM27097-01	Subcellular Effects of Metabolic Hormones on Rat Liver	Cardell, R. R., Jr.	Cincinnati Univ. Med. Coll. Cincinnati, OH	$ 71,199
RO1AM00608-26	Structure and Activity of Insulin	Carpenter, F. H.	California University Berkeley, CA	$ 77,083
RO1AM18382-06	Mechanism of Action of Insulin	Carter, J. R., Jr.	Case Wes. Res. U. Med. Sch. Cleveland, OH	$ 131,891
RO1AM20306-03	Glucocorticoid Permissive Action on Liver Metabolism	Chan, T. M.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 50,929
RO1AM21065-03	Phosphatidylinositol Metabolism and Insulin Secretion	Clements, R. S., Jr.	Alabama Univ. Med. College Birmingham, AL	$ 43,981
RO1AM22124-02	Endocrine and Substrate Controls on Carbon Flow	Connett, R. J.	Rochester Univ. Med. Sch. Rochester, NY	$ 38,064
RO1AM22102-02	Insulin and Hepatic Macrophages	Cornell, R. P.	NE Missouri State Univ. Kirksville, MO	$ 24,104
RO1AM18370-05	Synthesis and Biology of Analogues of Somatostatin	Coy, D. H.	Tulane University Med. Sch. New Orleans, LA	$ 45,831
RO1AM21185-03	Pancreatic Islet Electrical Activity and Secretion	Crill, W. E.	University of Washington Seattle, WA	$ 31,494
RO1AM17893-06	Insulin Action on the Fat Cell Surface Membrane	Czech, M. P.	Brown Univ. Med. School Providence, RI	$ 119,976

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM25724-01	Receptor Activation in Insulin Action	Das, M.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 42,912
RO1AM01526-23	Hormonal Control of Chondroitin Sulfate Synthesis	Daughaday, W. H.	Washington Univ. Med. Sch. St. Louis, MO	$ 100,677
RO1AM14702-09	Mechanisms of Insulin Antagonism	Davidson, M. B.	California Univ. Med. Sch. Los Angeles, CA	$ 83,342
RO1AM24092-02	Insulin Action and Insulin Secretion in Health and Disease	De Fronzo, R. A.	Yale Univ. Medical School New Haven, CT	$ 103,573
RO1AM18024-04	The Mechanism of Insulin Degradation	Dixon, J. E.	Purdue Research Foundation Lafayette, IN	$ 53,930
RO1AM25974-01	Hypothalamic Lesions and Pancreatic Islet Function	Dobbs, R. E.	Texas University Dallas, TX	$ 47,220
RO1AM19846-03	Allosteric Hormone Binding Related to Biologic Effect	Donner, D. B.	Sloan-Kettering Institute New York, NY	$ 65,881
RO1AM25779-01	Structure and Transcription of Insulin Genes	Efstratiadis, A.	Harvard Univ. Med. School Boston, MA	$ 146,721
RO1AM16008-07	Regulation of Biosynthesis and Secretion of Glucagon	Ensinck, J. W.	Washington U. Med. School Seattle, WA	$ 84,723
RO1AM21285-02	The Role of Glucagon in Diabetes	Epand, R. M.	McMaster Univ. Med. School Ontario, Canada	$ 24,196
RO1AM24064-02	Activation of Membrane Processes by Insulin	Erij, D. J.	New York Univ. Med. College Brooklyn, NY	$ 52,613
RO1AM21470-02	Insulin and Catecholamine in Carbohydrate Metabolism	Fain, J. N.	Brown Univ. Medical School Providence, RI	$ 91,934
RO1AM17780-06	Studies on Secretion in Pituitary and Other Cells	Farquhar, M. G.	Yale Univ. Medical School New Haven, CT	$ 134,377
RO1AM21163-03	Hypothalamic Regulation of the Endocrine Pancreas	Fawcett, C. P.	Texas Univ. Medical School Dallas, TX	$ 45,099
RO1AM13526-10	Hormones, Substrates, and Liver in Glucose Homeostasis	Felig, P.	Yale Univ. Medical School New Haven, CT	$ 130,400

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM21353-05	Decreased Insulin Sensitivity in Diabetes Mellitus	Fineberg, S. E.	Indiana Univ. Med. Sch. Indianapolis, IN	$ 90,012
RO1AM17326-07	Pituitary Hormone and Insulin Secretion and Production	Fleischer, N. S.	A. Einstein Med. College Bronx, NY	$ 136,416
RO1AM25826-01	The EGF Receptor; Structure, Function, and Homology	Fox, C. F.	California University Los Angeles, CA	$ 90,006
R23AM26033-01	Pancreatic Function in the Non-Obese Diabetic Hamster	Frankel, B. J.	California University Los Angeles, CA	$ 43,042
RO1AM19751-02	Glucocorticoid Control of Hepatic Metabolism	Friedmann, N.	Texas Univ. Med. School Houston, TX	$ 40,896
RO1AM19952-03	Regulation of Gluconeogenic Enzymes by Hormones	Garrison, J. C.	Virginia Univ. Med. School Charlottesville, VA	$ 30,757
RO1AM20411-03	Alpha and Beta Cell Function in Human Diabetes	Gerich, J. E.	Mayo Foundation Rochester, MN	$ 79,609
RO1AM20837-03	Pancreatic Somatostatin Secretion *In Vitro*	Gerich, J. F.	Mayo Foundation Rochester, MN	$ 84,244
5R01AM21240-03	Construction of an Insulin-Producing Bacterial Strain	Gilbert, W.	Harvard University Cambridge, MA	$ 131,686
R23AM25909-01	Mechanism of Pancreatic Polypeptide Secretion	Gingerich, R. L.	Washington Univ. Med. Sch. St. Louis, MO	$ 30,744
RO1AM21084-03	Radioimmunonoassay of the Somatomedins in Diabetes	Ginsberg, B. H.	Iowa University Med. Coll. Iowa City, IA	$ 50,003
RO1AM21128-02	Insulin Receptors During *In Vitro* Differentiation	Ginsberg, B. H.	Iowa University Med. Coll. Iowa City, IA	$ 39,323
RO1AM26667-01	Binding of Insulin to Nuclei	Goldfine, I. D.	Mt. Zion Hosp./Med. Ctr. San Francisco, CA	$ 79,088
RO1AM19392-04	Mechanism of Action of Growth Hormone	Goodman, M. H.	Mass. Univ. Med. Sch. Worcester, MA	$ 79,983
RO1AM21216-03	Insulin Effect on Amino Acid Metabolism in Adipocytes	Goodman, H. M.	Mass.Univ. Med. Sch. Worcester, MA	$ 48,170
Z01AM47019-02DB	Morphological Studies of Ligand Binding to Cells	Gorden, P.	NIAMDD, NIH Bethesda, MD	$ 105,000

HORMONES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM20184-02	Insulin and Glucagon Interaction with Kidney Cells	Gordon, E. E.	New York Med. College New York, NY	$ 64,246
R01AM20858-02	Insulin Receptors and Mechanism of Insulin Action	Granner, D. K.	Iowa University Med. Coll. Iowa City, IA	$ 59,461
R01AM24037-02	Hormonal Regulation of Gluconeogenic Enzyme Synthesis	Granner, D. K.	Iowa University Med. Coll. Iowa City, IA	$ 55,204
R01AM01410-21	Insulin and Glucagon Synthesis and Secretion In Vitro	Grodsky, G. M.	California Univ. Med. Sch. San Francisco, CA	$ 147,623
R01AM19891-02	Regulation of Intracellular Proteolysis by Insulin	Gunn, J. M.	Texas A&M Res. Foundation College Station, TX	$ 51,687
R01AM21121-03	Structure-Function Relationships of Glucagon	Gurd, R. S.	Indiana Univ. Med. School Bloomington, IN	$ 31,992
R01AM15059-09	Insulin and Protein Turnover in Animal Tissues	Hansen, R. J.	Calif. Univ. Vet. Med. Sch. Davis, CA	$ 89,606
R01AM25541-02	Hormonal Regulation of Enzyme Levels in Mammalian Tissue	Hanson, R. W.	Case Western Reserve Univ. Cleveland, OH	$ 72,188
R23AM26065-01	Islet Hormone Secretion in Unique A, B & D Cell Cultures	Harris, J. N.	Franklin Inst. of Pennsyl. Philadelphia, PA	$ 60,407
R01AM21178-03	Hormonal Control of Hepatic Glucose and Fat Synthesis	Harris, R. A.	Indiana Univ. Medical Sch. Indianapolis, IN	$ 52,256
R01AM21423-02	Diabetes, Insulin and Uracil Nucleotide Metabolism	Haugaard, E. S.	Pennsylvania U. Med. Sch. Philadelphia, PA	$ 72,661
R01AM14347-11	Hormonal Control of Hepatic Gluconeogenesis	Haynes, R. C., Jr.	Virginia Univ. Med. School Charlottesville, VA	$ 85,424
R01AM22150-02	Insulin Receptor Relationship with Immunocompetent Cells	Helderman, J. H.	Texas Univ. SW Med. School Dallas, TX	$ 95,264
R01AM25780-01	Insulin and Renal Metabolism of 25-Hydroxyvitamin D3	Henry, H. L.	California University Riverside, CA	$ 13,037
R01AM21140-02	Mechanisms of Diabetic Phagocyte Control by Insulin	Hill, H. R.	Utah Univ. Med. College Salt Lake City, UT	$ 88,976

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM21058-02	Growth Hormone and Somatomedin in Diabetes Mellitus	Hintz, R. L.	Stanford Univ. Med. School Stanford, CA	$ 93,500
RO1AM22141-02	Cellular Heterogeneity and Hormonal Regulation in Liver	Hoek, J. B.	Pennsylvania Medical School Philadelphia, PA	$ 67,817
RO1AM23015-01	Binding and Action of Insulin in the Thymus	Hofert, J. F.	Nebraska Univ. Med. School Lincoln, NE	$ 34,397
RO1AM21292-02	A Novel Approach to Insulin-Receptor Affinity Columns	Hofmann, K. H.	Pittsburgh Univ. Med. Sch. Pittsburgh, PA	$ 33,701
RO1AM23024-02	Somatostatin-Islet Interaction: EM Autoradiography	Holladay, L. A.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 72,240
RO1AM26013-01	Role of Calcium in Insulin and Catecholamine Action	Honeyman, T. W.	Massachusetts U. Med. Sch. Worcester, MA	$ 66,180
RO1AM21116-03	Studies of Pancreatic Diabetes	Howard, J. M.	Medical College of Ohio Toledo, OH	$ 44,761
RO1AM21085-03	Glucagon Structure-Function Studies	Hruby, V. J.	Arizona University Tucson, AZ	$ 45,816
RO1AM20983-03	Effects of Insulin on Phosphoprotein Phosphatase	Huang, L. C.	Virginia Univ. Med. School Charlottesville, VA	$ 38,455
RO1AM25608-01	A Fundamental Study on Liposome-Encapsulated Insulin	Hwang, K. J.	Washington U. Pharm. Sch. Seattle, WA	$ 66,632
RO1AM03556-19A1	Experimental Studies: Insulin, Glucagon, Proinsulin	Izzo, J. L.	Rochester Univ. Med. School Rochester, NY	$ 58,987
RO1AM03556-18S1	Experimental Studies: Insulin, Glucagon, Proinsulin	Izzo, J. L.	Rochester Univ. Med. School Rochester, NY	$ 41,311
RO1AM20097-03	Morphological Studies on Mechanism of Insulin Action	Jarett, L.	Washington Univ. Med. Sch. St. Louis, MO	$ 75,894
RO1AM25913-01	Glucagon Metabolism in the Dog	Jaspan, J. B.	Chicago Univ. Med. School Chicago, IL	$ 43,584
RO1AM25318-02	The Regulation of Insulin Secretion	Johnson, D. G.	Arizona Univ. Med. School Tucson, AZ	$ 40,892
Z01AM47020-02DB	Insulin Antibodies, Insulin Allergy, and Insulin Resistance	Kahn, C. R.	NIAMDD, NIH Bethesda, MD	$ 32,000

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Z01AM47021-01DB	Insulin Receptors and Action in Cultured Human Fibroblasts	Kahn, C. R.	NIAMDD, NIH Bethesda, MD	$ 126,000
RO1AM26904-01	Glucocorticoid Action in Developing Rat Liver	Kalimi, M. Y.	Va. Comwlth. U. Med. Coll. Richmond, VA	$ 77,011
RO1AM10305-14	Metabolic Effects of Insulin Antagonism and Deficiency	Kalkhoff, R. K.	Medical Coll. of Wisconsin Milwaukee, WI	$ 62,551
R23AM26130-01	Role of Calcium and Cyclic AMP in Insulin Release	Karl, R. C.	Chicago Medical School Chicago, IL	$ 42,399
RO1AM12925-10	Synthetic Insulins and Analogs	Katsoyannis, P. S.	Mt. Sinai Medical School New York, NY	$ 141,137
RO1AM12865-11	Insulin Control of Key Enzymes for Glucose Homeostasis	Kim, K. H.	Purdue Univ. Agric. School Lafayette, IN	$ 61,229
RO1AM09072-15	Structure-Function Relationships in Proteins	Kimmel, J. R.	Kansas Univ. Med. School Kansas City, KS	$ 78,090
RO1AM24051-02	Glucocorticoid Permissive Effects on Gluconeogenesis	Kletzien, R. F.	W. Va. Univ. Med. Sch. Morgantown, WV	$ 39,301
RO1AM19925-03	Action of Insulin on Sugar Transport	Kono, T.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 48,314
RO1AM06725-18	Action of Insulin on Its Receptor and Phosphodiesterase	Kono, T.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 93,768
RO1AM24047-01A1	Insulin and Growth Peptides, Mechanism of Regulation	Koontz, J. W.	Colorado Univ. Med. School Denver, CO	$ 61,495
RO1AM25244-02	Hormone Effects on Reconstituted Membranes	La Belle, E. F., Jr.	Texas Univ. Med. Branch Galveston, TX	$ 39,434
RO1AM06181-18	Study of Secretion and Biosynthesis of Insulin	Lacy, P. E.	Washington Univ. Med. School St. Louis, MO	$ 147,159
RO1AM14334-11	Chemical Mechanism of Action of Insulin	Larner, J.	Virginia Univ. Med. School Charlottesville, VA	$ 148,610
RO1AM20307-03	Characterization of Submaxillary Gland "Big" Glucagon	Lawrence, A. M.	VA Hospital Hines, IL	$ 23,483
R23AM25705-01	Putative Mediators of Insulin Secretion	Laychock, S. G.	Va. Comwlth. U. Phar. Coll. Richmond, VA	$ 45,099

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM01324-23	Hormones and Intermediary Metabolism	Lebovitz, H. E.	Duke Univ. Med. School Durham, NC	$ 110,317
RO1AM21720-03	Role of Secretin in Human Insulin Secretion	Lerner, R. L.	Cedars Sinai Medical Center Los Angeles, CA	$ 77,732
RO1AM16065-08	Primary Structures of Growth Hormones and Prolactins	Lewis, U. J.	Scripps Clinic/Res. Fdn. La Jolla, CA	$ 46,180
RO1AM21290-03	Membrane and Metabolic Studies of Diabetogenic Factors	Lewis, U. J.	Scripps Clinic/Res. Fdn. La Jolla, CA	$ 101,653
RO1AM16457-06	Purification and Biochemistry of Somatomedin	Liberti, J. P.	Va. Comwlth. U. Phar. Coll. Richmond, VA	$ 54,099
RO1AM20129-04	Insulin Action in Normal and Resistant States	Lockwood, D. H.	Rochester Univ. Med. Sch. Rochester, NY	$ 135,127
RO1AM16385-06	Molecular Control of Adipocyte Metabolism by Insulin	Lynn, W. S.	Duke Univ. Med. School Durham, NC	$ 51,427
RO1AM25410-01	Hormone Regulation of Hepatocyte Carbohydrate Metabolism	Malbon, C. C.	New York State University Stony Brook, NY	$ 44,011
RO1AM20777-03	The Ontogeny of Puberty in Diabetes Mellitus	Marks, J. F.	Univ. of Texas SW Med. Sch. Dallas, TX	$ 64,056
RO1AM24069-02	Characterization of an Insulin Receptor Component	Maturo, J. M., III	Long Island University Greenvale, NY	$ 53,881
RO1AM25897-01	Mechanism of Insulin Action and the Role of Calcium	McDonald, J. M.	Washington Univ. Med. Sch. St. Louis, MO	$ 67,015
Z01AM70501-01EFS	Mechanism of Insulin Action on the Adipose Cell	McGuire, E. A. H.	NIAMDD, NIH Bethesda, MD	$ 82,000
RO1AM18130-06	Insulin and HGH: Secretion and Metabolic Actions	Merimee, T. J.	Florida Univ. Med. College Gainesville, FL	$ 90,138
RO1AM24039-02	Synthetic Analogs of Glucagon for Diabetes Studies	Merrifield, R. B.	Rockefeller University New York, NY	$ 61,250
RO1AM22156-02	Biological Studies on Pancreatic Polypeptides	Meyers, C. A.	Tulane Univ. Med. School New Orleans, LA	$ 39,187
RO1AM17082-06	Neural Regulation of Insulin Secretion Rate	Miller, R. E.	Kentucky Univ. Med. Coll. Lexington, KY	$ 62,094

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM18269-05	Regulation of Hepatic Glycogen Synthesis	Miller, T. B., Jr.	Massachusetts U. Med. Sch. Worcester, MA	$ 38,829
RO1AM17531-05	Mechanism of Insulin Action upon Sodium Pump	Moore, R. D.	New York State University Plattsburgh, NY	$ 35,770
RO1AM21059-03	Role of Sodium Pump in Cellular Action of Insulin	Moore, R. D.	New York State University Plattsburgh, NY	$ 56,636
R23AM25821-01	Establishment of Insulin-Secreting Beta Cell Lines	Mossman, B. T.	Vermont Univ. Med. College Burlington, VT	$ 38,289
Z01AM54024-01DD	In Vitro Insulin Resistance in Pima Indians	Mott, D. M.	NIAMDD, NIH Bethesda, MD	$ 27,000
Z01AM54020-02DD	Down Regulation of Insulin Receptors In Vitro in Fibroblasts and Monocytes	Mott, D. M.	NIAMDD, NIH Bethesda, MD	$ 54,000
RO1AM22048-02	Altered Insulin Sensitivity in Myotonic Dystrophy	Moxley, R. T.	Rochester Univ. Med. School Rochester, NY	$ 73,512
RO1AM03535-21	The Mode of Action of Steroid Hormones	Munck, A. U.	Dartmouth Medical School Hanover, NH	$ 158,485
RO1AM24038-02	Corticoid Effect on Fat Cell Response to Insulin	Nelson, D. H.	Utah Univ. Med. College Salt Lake City, UT	$ 91,042
RO1AM16921-05	Role of Proglucagon in Glucagon Biosynthesis	Noe, B. D.	Emory Univ. Med. Sch. Atlanta, GA	$ 37,697
RO1AM19890-03	Localization of Conversion of Proglucagon to Glucagon	Noe, B. D.	Emory Univ. Med. School Atlanta, GA	$ 31,839
RO1AM27094-01	Cellular Actions of Insulin in the Kidney Cortex	Northrup, T. E.	Eastern Va. Med. School Norfolk, VA	$ 63,424
RO1AM25241-02	Insulin Receptors and the Glucose Transport System	Olefsky, J. M.	Colorado Univ. Med. Sch. Denver, CO	$ 36,788
RO1AM25242-03	Plasma Insulin Levels and Adipocyte Metabolism	Olefsky, J. M.	Colorado Univ. Med. Sch. Denver, CO	$ 49,950
RO1AM26180-01	Mechanisms of Insulin Resistance in Man	Olefsky, J. M.	Colorado Univ. Med. Sch. Denver, CO	$ 113,516

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM20421-03	Contractile Proteins of Secretory Tissues	Ostland, R. E., Jr.	Washington Univ. Med. Sch. St. Louis, MO	$ 76,584
R23AM26041-01	Insulin Regulation of Protein Phosphorylation	Palmer, J. L.	Mass. General Hospital Boston, MA	$ 38,548
RO1AM23032-02	Insulin and the Regulation of the Melanoma Phenotype	Panelek, J. M.	Yale Univ. Med. School New Haven, CT	$ 20,128
RO1AM21373-02	Studies of Pancreatic Somatostatin Physiology	Patel, Y. C.	McGill U R Vic. Hospital Montreal, Canada	$ 37,910
RO1AM21192-03	Prostaglandins and Secretion of Glucagon and Insulin	Pek, S.	Michigan Univ. Med. School Ann Arbor, MI	$ 82,793
RO1AM16746-07	Control of Insulin Biosynthesis	Permutt, M. A.	Washington Univ. Med. Sch. St. Louis, MO	$ 82,167
RO1AM25940-01	Isolation and Characterization of Fish Islet Hormones	Permutt, M. A.	Washington Univ. Med. Sch. St. Louis, MO	$ 80,811
RO1AM21186-03	Effects of Growth Factors in Diabetics	Phares, C. K.	Nebraska Univ. Med. School Lincoln, NE	$ 59,425
RO1AM26067-01	Insulin Secretion in the Fetal and Neonatal Lamb	Philipps, A. F.	Conn. Univ. Medical School Farmington, CT	$ 74,886
RO1AM19361-03	Cell Biology of the Adipocyte on Muscle	Pohl, S. L.	Virginia Univ. Med. School Charlottesville, VA	$ 30,223
RO1AM18608-05	Characterization of Human Insulin Receptor	Pollet, R. J.	South Fla. Univ. Med. Sch. Tampa, FL	$ 48,793
RO1AM12829-11	Neural Regulation of Pancreatic Hormone Secretion	Porte, D., Jr.	Washington Univ. Med. Sch. Seattle, WA	$ 83,511
RO1AM19573-03	Polypeptide Hormone Receptors	Posner, B. I.	McGill University Montreal, Canada	$ 49,703
RO1AM25202-02	Regulation of Insulin Effects	Przybylski, R. J.	Case Wes. Res. Univ. M.S. Cleveland, OH	$ 75,448
RO1AM19587-03	Hormonal Control of Splanchnic and Forearm Metabolism	Rabinowitz, D.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 77,204

HORMONES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM25313-02	The Kidney Insulin, Proinsulin and C-Peptide	Rabkin, R.	Inst. M.R. Santa Clara Val. San Jose, CA	$ 78,875
RO1AM21018-02	Regulation of Insulin and Glucagon Receptors	Raizada, M. K.	Iowa Univ. Med. College Iowa City, IA	$ 56,287
RO1AM12705-10A1	Hormone and Diet Control of Gluconeogenesis	Ray, P. D.	North Dakota U. Med. Sch. Grand Forks, ND	$ 41,146
RO1AM19610-03	Pancreatic and Intestinal Glucagons in Rats and Man	Recant, L.	Georgetown Univ. Med. Sch. Washington, DC	$ 51,582
Z01AM24390-06LBP	Hormones and Receptors: Insulin and Insulin-Like Growth Factors (Somatomedins)	Rechler, M. M.	NIAMDD, NIH Bethesda, MD	$ 306,000
R23AM25939-01	Hormonal Control of Glycogen Metabolism	Roach, P. J.	Virginia Univ. Med. School Charlottesville, VA	$ 44,338
Z01AM15001-05LNE	Structure-Function Relationship of Glucagon	Rodbell, M.	NIAMDD, NIH Bethesda, MD	$ 49,000
RO1AM19271-03	Structure and Properties of Diabetogenic Peptides	Rogol, A. D.	Virginia Univ. Med. School Charlottesville, VA	$ 32,249
RO1AM21248-03	Hormonal Regulation of Adipocyte Development In Vitro	Rosen, O. M.	A. Einstein Med. College Bronx, New York	$ 77,364
RO1AM21248-02S1	Hormonal Regulation of Adipocyte Development In Vitro	Rosen, O. M.	A. Einstein Med. College Bronx, NY	$ 9,000
RO1AM13941-10	Proinsulin and C-Peptide: Secretion and Metabolism	Rubenstein, A. H.	Chicago Medical School Chicago, IL	$ 89,500
RO1AM21575-03	Prostaglandins and Cyclic GMP in Differentiation	Russell, T. R.	Miami U. Med. Sch. Coral Gables, FL	$ 57,266
RO1AM21344-03	Differentiation in the Endocrine and Exocrine Pancreas	Rutter, W. J.	California Univ. Med. Sch. San Francisco, CA	$ 135,048
RO1AM20383-03	Insulin Gene Expression During Pancreas Development	Saunders, G. F.	Texas U. Anderson Hospital Houston, TX	$ 57,393
RO1AM21086-03	Diabetes Mellitus: Insulin Control of Hexose Transfer	Schachter, D.	Col. U. Phys./Surg. Coll. New York, NY	$ 71,931

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM18617-05	Role of Somatomedin in Growth and Diabetes Mellitus	Schalch, D. S.	Colorado Univ. Med. School Denver, CO	$ 79,200
Z01AM15400-05LNE	Hormones, Lipoprotein Lipase and Lipid Metabolism	Scow, R. O.	NIAMDD, NIH Bethesda, MD	$ 170,000
R23AM25961-01	Modulation of Somatostatin and Insulin Receptors	Schonbrunn, A.	Harvard U. Pub. Hlth. Sch. Cambridge, MA	$ 40,600
RO1AM25326-02	Cyclic AMP-Dependent Phospho-proteins and Insulin Release	Shubart, U. K.	A. Einstein Med. College Bronx, NY	$ 76,379
RO1AM22038-02	Mechanism of Insulin's Action upon Transport	Scott, W. N.	Mt. Sinai Medical School New York, NY	$ 57,481
5RO1AM20973-02	Gastric Inhibitory Polypeptide in Health and Diabetes	Service, J. F.	Mayo Foundation Rochester, MN	$ 70,873
R23AM26093-01	Effects of Insulin on Hexose Transport in Sarcolemma	Shanahan, M. F.	Wisconsin Univ. Med. Sch. Madison, WI	$ 41,180
RO1AM26101-01	Insulin and Growth Hormone Control of Somatomedin	Shapiro, L. E.	Montefiore Hosp./Med. Ctr. Bronx, NY	$ 78,883
RO1AM21323-03	Redox Changes on B Cell Viability and Insulin Release	Slonia, E. A.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 45,474
RO1AM25325-02	Neural Control of Islet Mass in Obese/Diabetic Rats	Smith, P. H.	N.Y. State U. Med. Coll. Syracuse, NY	$ 34,405
RO1AN21264-02	Sarcolemmal Membrane Alterations in Diabetes	Smith, P. B.	Bowman Gray Med. School Winston-Salem, NC	$ 32,662
RO1AM21158-03	Glucagon and Insulin Receptors in Glucose Metabolism	Soman, V. R.	Yale Univ. Med. School New Haven, CT	$ 53,607
RO1AM18759-04	Cell Surface Alterations by Growth Hormones	Sonenberg, M.	Sloan-Kettering Institute New York, NY	$ 79,960
RO1AM24006-02	Islet Somatostatin Secretion and Its Paracrine Role	Sorenson, R. L.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 67,568
RO1AM25648-02	The Regulation of Somatomedin Synthesis by Insulin	Spencer, E. M.	Children's Hospital San Francisco, CA	$ 100,674
RO1AM13914-10	Studies on Pancreatic Hormones	Steiner, D. F.	Chicago Medical School Chicago, IL	$ 211,631

HORMONES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM21993-02	Analysis of Insulin and MSA Action in Cell Hybrids	Straus, D. S.	California University Riverside, CA	$ 45,791
RO1AM21094-03	Insulin Receptors - Lymphocytes Nature and Significance	Strom, T. B.	Peter Bent Brigham Hospital Boston, MA	$ 71,003
RO1AM17347-07	Insulin Sensitive Glucoregulator in the CNS	Szabo, A. J.	New York Medical College Valhalla, NY	$ 113,783
RO1AM18347-06	Biosynthesis and Secretion of Peptide Hormones	Tager, H. S.	Chicago Medical School Chicago, IL	$ 60,827
NO1AM92205	Prepare Desoctapeptide Insulin and Chicken Insulin	Tometsko, A. M.	Litron Laboratories, Ltd.	$ 92,983
RO1AM20917-02	Somatostatin: Physiology and Application in Diabetes	Vale, W. W.	Salk Institute	$ 188,048
RO1AM01022-24	Role of Endocrine Secretions in Growth and Development	Van Wyk, J. J.	N. C. Univ. Medical School Chapel Hill, NC	$ 128,890
RO1AM24057-04	Regulation and Function of Insulin Degradation	Varadani, P. T.	Wright St. Univ. Med. Sch. Dayton, OH	$ 135,888
RO1AM20785-03	Sex Hormones and Behavior: Effects of Diabetes	Wade, G. N.	Massachusetts University Amherst, MA	$ 54,830
RO1AM25633-02	Lysosomal Role in Insulin and Glucagon Degradation	Ward, W. F.	Texas Univ. Med. School San Antonio, TX	$ 62,193
RO1AM20349-03A1	Somatostatin, Glucagon, and Diabetes	Weir, G. C.	Va. Comwlth. U. Med. Coll. Richmond, VA	$ 81,159
RO1AM19343-03	Studies of Pancreatic Somatostatin	Weir, G. C.	Va. Comwlth. U. Med. Coll. Richmond, VA	$ 48,988
RO1AM21089-02	Regulation of Pancreatic Acinar Function by Insulin	Williams, J. A.	California Univ. Med. Sch. San Francisco, CA	$ 72,141
RO1AM15120-09	Control of Metabolism in Normal and Diseased States	Williamson, J. R.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 114,811
RO1AM21381-15	Conformational Analysis by NMR	Williamson, K. L.	Mt. Holyoke College South Hadley, MA	$ 59,566

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM19998-03	Hormonal Regulation of Hepatic Ketogenesis	Woodside, W. F.	New Mexico U. Med. School Albuquerque, NM	$ 38,125
RO1AM04842-18	Endocrine Regulation of Protein Synthesis	Wool, I. G.	Chicago Medical School Chicago, IL	$ 64,819
RO1AM21801-02	Synthesis and Cloning of Human Insulin Gene	Wu, R.	Cornell University Ithaca, NY	$ 76,630
RO1AM25258-02	Hormonal Regulation of Mitochondrial Function	Yamazaki, R. K.	Wayne State U. Med. Coll. Detroit, MI	$ 59,584
NO1AM92204	Insulins, Insulin Analogues, and Growth Factors	Yip, C. C.	University of Toronto Toronto, Canada	$ 43,541
RO1AM16177-08	Mechanisms of Action of Steroid Hormones	Young, D. A.	Rochester U. Med. School Rochester, NY	$ 112,791
National Institute of Child Health and Human Development				
RO106284-08	Production Rate and Concentration of Hormones	Kowarski, A.	Johns Hopkins University Baltimore, MD	$ 74,025
National Institute of General Medical Sciences				
GM22497	Microtubules and the Mechanism of Secretion	Sherline, P.	University of Connecticut Storrs, CT	$ 82,504
U. S. Department of Agriculture				
0077567	Factors Controlling and Modifying Insulin Secretion	Curry, D.	University of California Davis, CA	*
0032430	Hormonal Control of Cellular Differentiation and Development	Kim, K. H.	Purdue University Lafayette, IN	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Veterans' Administration				
50940835-1	Insulin Binding to Hepatocytes	Bandisode, M.	VAMC Augusta, GA	*
58441870-1	Insulin Receptors and Insulin-Modulated Immune Function	Bar, R.	VAMC Iowa City, IA	*
69139065-2	Absorption and Action of Intraperitoneal Insulin in Dogs	Blumenkrantz, M.	VAMC Wadsworth Los Angeles, CA	*
62642871-1	The Role of Cyclic Nucleotides in Cartilage Growth	Bomboy, J.	VAMC Nashville, TN	*
69141031-6	Effects of Naloxone and Opiate Withdrawal on Pituitary Hormone Release	Carlson, H.	VAMC Wadsworth, CA	*
52841297-1	Effect of Insulin Upon Hepatic Regeneration in Cirrhosis	Caruana, J.	VAMC Buffalo, NY	*
63040789-1	Mechanisms of Transepithelial Electrolyte Transport	Charney, A.	VAMC New York, NY	*
53735723-2	The Relationship Between Subcellular Organelles and Hormone Secretion	Chertow, B.	VAMC West Side Chicago, IL	*
58330658-1	Studies on the Mechanism of Hormone Action	Clark, C.	VAMC Indianapolis, IN	*
52135675-2	The Role of Myoinositol in Insulin Secretion	Clements, R.	VAMC Birmingham, AL	*
52141295-3	Phosphatidylinositol Metabolism and Insulin Secretion	Clements, R.	VAMC Birmingham, AL	*
58038707-2	Regulation of Insulin Synthesis	Comstock, J.	VAMC Houston, TX	*
68934227-14	Alanine Infusion Tests in Hepatocellular Disease	Conn, H.	VAMC W. Haven, CT	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
60343412-1	Multiple Endocrine Neoplasia in Laboratory Animals	Cyrus, J.	VAMC Louisville, KY	*
61435109-4	Insulin and Glucagon Binding and Degradation by the Cell Membrane	Duckworth, W.	VAMC Memphis, TN	*
52739189-1	Increased Glucagon Secretion in Protein Fed Rats - Relationship to Plasma	Eisenstein, A.	VAMC Brooklyn, NY	*
52643026-1	The Role of Pancreatic and Gut Glucagon In Hyperphagia	Eng, J.	VAMC Bronx, NY	*
50642343-1	Hormonal Aspects of Peptic Ulcer Disease	Fiddiangreen, R.	VAMC Ann Arbor, MI	*
58343727-1	Decreased Insulin Sensitivity in Diabetes Mellitus	Fineberg, S.	VAMC Indianapolis, IN	*
58442414-1	Insulin Receptors During In Vitro Differentiation - Radioimmunoassay of the Somatomes	Ginsberg, B.	VAMC Iowa City, IA	*
66236029-1	Hormone Action at the Cellular and Subcellular Levels	Goldfine, I.	VAMC San Francisco, CA	*
50841511-1	The Influence of Somatostatin on Liver Regeneration in the Adult Rat	Goldman, A.	VAMC Decatur, GA	*
56141213-1	Plasma Glucagon and VIP in Normal Subjects and in Cirrhosis of the Liver	Green, J.	VAMC East Orange, NJ	*
69538386-5	Growth Hormone and Prolactin Secretion in Diabetes	Hagen, T.	VAMC Wood, WI	*
54635910-1	Hormonal Mechanisms of Adaptation to Orthostasis in Spinal Cord Injured Patients	Jacobi, J.	VAMC Miami, FL	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
55832702-1	Analysis of Biliary Secretory Mechanisms and Their Control	Jones, R.	VAMC Durham, NC	*
55843050-3	GI Hormone Control of Canalicular and Ductular Bile Production	Jones, R.	VAMC Durham, NC	*
66031089-1	Role of Prostaglandins in Health and Disease	Jubiz, W.	VAMC Salt Lake City, UT	*
52743449-1	Hyperglucagonemia in Cirrhosis of Liver - Role of Increased Plasma Ammonia	Kabadi, U.	VAMC Brooklyn, NY	*
53539038-13	Studies of Storage and Secretion Granules	Koenig, H.	VAMC Lakeside Chicago, IL	*
64041361-3	Gastrointestinal Motility - Normal and Abnormal	Kohatsu, S.	VAMC Palo Alto, CA	*
66241266-1	Studies of the Intracellular Mechanisms of Insulin Action	Korc, M.	VAMC San Francisco, CA	*
69140692-1	Regulation of Renal Cell Metabolism and Function	Kurokawa, K.	VAMC Wadsworth Los Angeles, CA	*
53733460-1	The Relationship of Aldosterone to Edema Formation and Acid Excretion in Dogs	Kurtzman, N.	VAMC West Side Chicago, IL	*
53740980-2	Study of the Mechanism of Acidosis and Hyperkalemia in Patients with Isolated Hypoaldosteronism	Kurtzman, N.	VAMC West Side Chicago, IL	*
57841868-2	Study of Patterns of Secretion of Saliva Insulin in Man	Lawrence, A.	VAMC Hines Chicago, IL	*
45539858-1	Renin Angiotensin and Aldosterone Systems in Diabetes Mellitus	Lespier, L.	VAMC San Juan, PR	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
69134941-1	Role of ATPases in Insulin Secretion and Action in Diabetes	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
69143380-13	Gut Factors and Endocrine Pancreatic Function	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
54438285-1	Factors Affecting Plasma and Urinary Nucleotides	Lin, T.	VAMC Columbia, SC	*
52336178-2	*In Vitro* Synthesis and Secretion of Insulin by Mammalian Pancreas	Marks, L.	VAMC Boston, MA	*
56140040-2	A Comparison of the Release of ACTH During Physiological and Pharmacological Stress	May, P.	VAMC East Orange, NJ	*
69535548-2	Isolation, Characterization and Purification of NSILA Inhibitors	Meade, R.	VAMC Wood, WI	*
66343290-1	Prostaglandin E in Hormonal Regulation of Glucose Homeostasis	Metz, S.	VAMC Seattle, WA	*
54138156-1	Hormonal Regulation of Mammalian Nitrogen Metabolism	Miller, R.	VAMC Cleveland, OH	*
61830235-1	Hormonal and Non-Hormonal Control of the Glycogen Synthetase System	Nuttall, F.	VAMC Minneapolis, MN	*
64037063-3	Insulin Binding to Isolated Human Adipocytes	Olefsky, J.	VAMC Palo Alto, CA	*
64039830-4	Relationship Between Insulin Binding and Insulin's *In Vitro* Action in Normal and Insulin Resistant Subjects	Olefsky, J.	VAMC Palo Alto, CA	*

* Funding information not available.

HORMONES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
64042095-5	Effect of Insulin Deficiency and Hyperinsulinemia on Adipocyte Metabolism	Olefsky, J.	VAMC Palo Alto, CA	*
66436572-1	Effect of Neuroactive Drugs on Pituitary Hormone Release Across Sleep-Wake Cycles	Parker, D.	VAMC San Diego, CA	*
69141563-8	Serum Glucagon Levels in Surgery Under Spinal and General Anesthesia	Passaro, E.	VAMC Wadsworth Los Angeles, CA	*
52134551-1	The Action and Metabolism of Thyroid Hormones	Pittman, C.	VAMC Birmingham, AL	*
66329015-2	Regulation of Insulin Secretion	Porte, D.	VAMC Seattle, WA	*
66329017-3	A Model Study of Blood Glucose and Insulin Homeostasis	Porte, D.	VAMC Seattle, WA	*
55435775-1	Portal Diversion for Hyperlipidemia	Putnam, C.	VAMC Denver, CO	*
54934352-1	Hormonal and Metabolic Studies in Diabetes Ketoacidosis	Raskin, P.	VAMC Dallas, TX	*
54939599-2	Glucagon Secretion in Well-Controlled Diabetes Mellitus	Raskin, P.	VAMC Dallas, TX	*
54939600-3	Metabolic Studies in Functional Hypoglycemia	Raskin, P.	VAMC Dallas, TX	*
54939602-5	Effect of Exogenous Glucagon on the Blood Sugar Response in Diabetes Mellitus	Raskin, P.	VAMC Dallas, TX	*
4039145-4	Insulin Resistance in Psychotic Affective Diseases	Reaven, G.	VAMC Palo Alto, CA	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
64042609-6	Changes in Carbohydrate and Lipid Metabolism with Age and Renal Failure	Reaven, G.	VAMC Palo Alto, CA	*
68824758-1	Metabolic Studies - Diabetes and Prediabetes - Insulin Inhibitors	Recant, L.	VAMC Washington, DC	*
58343079-2	Regulation of Thirst and Vasopressin Secretion in Diabetes Mellitus	Robertson, G.	VAMC Indianapolis, IN	*
66337499-1	Interrelationship Between the Alpha Adrenergic Receptor and Prostaglandin E - Their Roles in Insulin Secretion and Diabetes Mellitus	Robertson, R.	VAMC Seattle, WA	*
62629256-1	The Growth Hormone Dependent Sulfation Factor (Somatomedin)	Salmon, W.	VAMC Nashville, TN	*
59829796-2	Immunoassay of Polypeptide Hormones	Sanders, L.	VAMC Little Rock, AR	*
52325262-4	Free Fatty Acid Mobilization in Patients with Hypopituitarism	Sawin, C.	VAMC Boston, MA	*
52330294-7	Growth Hormone and Diabetes Mellitus	Sawin, C.	VAMC Boston, MA	*
55638789-1	Metabolism in Endotoxemia and Its Modification by Glucocorticoids	Schumer, W.	VAMC North Chicago, IL	*
68843178-3	Renal and Electrolyte Research - Studies on Selective Hypoaldosteronism	Shalhoub, R.	VAMC Washington, DC	*
54941839-2	Extrapancreatic Glucagon-Containing A-Cells	Shannon, W.	VAMC Dallas, TX	*

* Funding information not available.

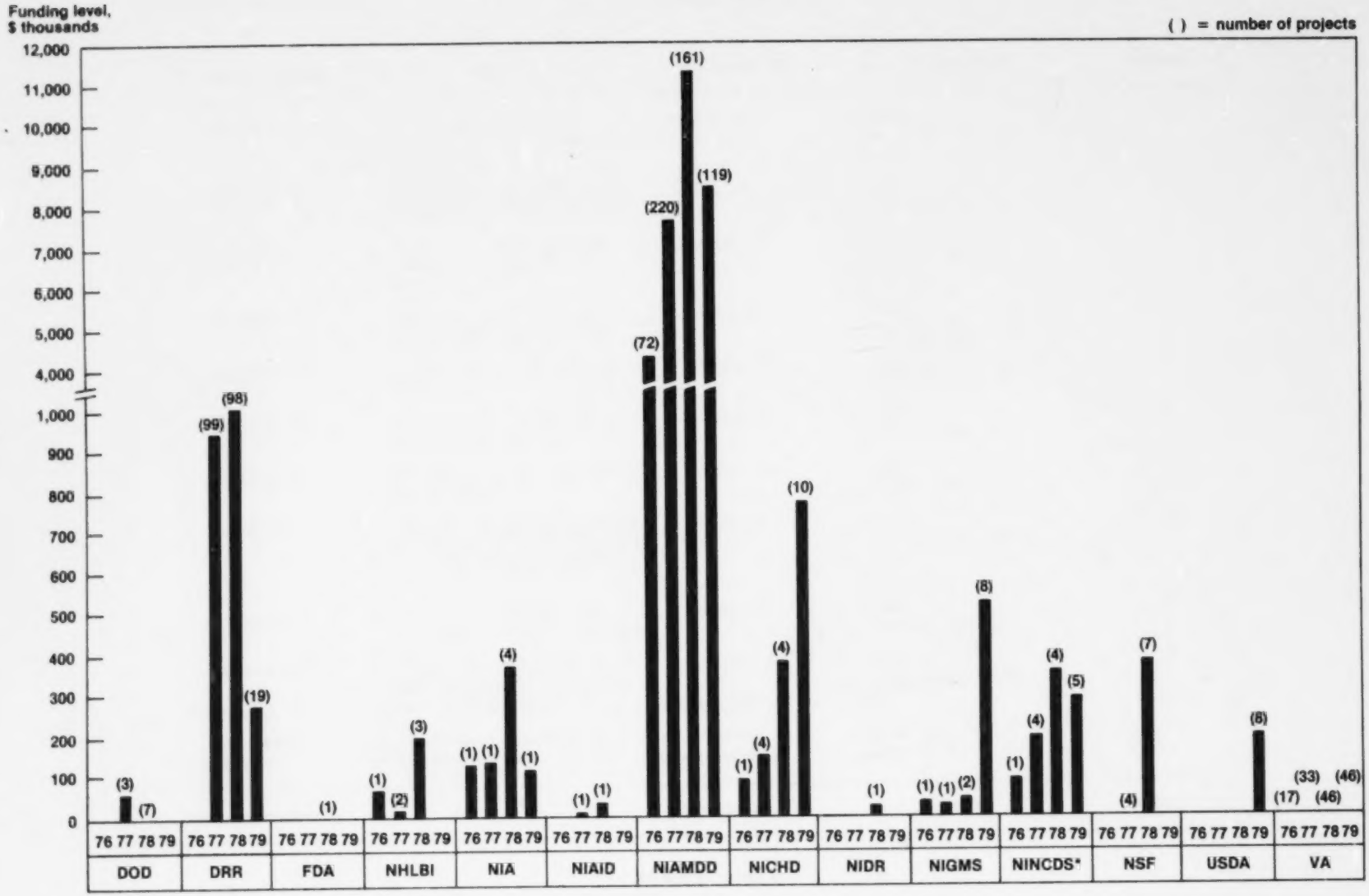
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
55641819-4	Total and Free Plasma Insulin Levels in Diabetic Subjects	Singh, S.	VAMC North Chicago, IL	*
58334365-1	Control of Urea Cycle Enzyme Induction in Mammalian Liver	Snodgrass, P.	VAMC Indianapolis, IN	*
61435901-3	Studies of Immunoreactive Insulin and Glucagon in Clinical States	Solomon, S.	VAMC Memphis, TN	*
55419384-1	Effect of Thymectomy and Splenectomy on Homografts	Starzl, T.	VAMC Denver, CO	*
64241121-1	Insulin and K Distribution Kinetics	Sterns, R.	VAMC Philadelphia, PA	*
59837182-3	The Effects of Insulin on the Membrane Na-K	Straub, K.	VAMC Little Rock, AR	*
55433616-1	Dynamics of Insulin Secretion and Regulation	Sussman, K.	VAMC Denver, CO	*
5985063-1	Role of Antidiuretic Hormone in Regulation of Salivary Flow and Implications Regarding Thirst	Towbin, E.	VAMC Little Rock, AR	*
5493339-3	Glucoregulatory Peptide Hormones in Health and Disease	Unger, R.	VAMC Dallas, TX	*
58338183-1	Studies of the Action of Glucagon in the Developing Rat Heart and Liver	Vinicor, F.	VAMC Indianapolis, IN	*
67341484-2	An Experimental Study on the Hepatotrophic Effects of Portal Blood	Williams, J.	VAMC Tampa, FL	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
67740225-1	Insulin and Glucagon in Fulminant Hepatitis	Wongsurawat, N.	VAMC Topeka, KS	*
65736550-1	Studies on Stimulation of Insulin Secretion	Zacharewicz, F.	VAMC St. Louis, MO	*

* Funding information not available.

Intermediary Carbohydrate and Protein Metabolism (B 5)



*Funding data for three FY 1979 projects were not available for inclusion.

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute on Aging				
RO1AG00764-03	Glucose Intolerance and Aging	DeFronzo, R. A.	Yale University New Haven, CT	$ 108,549
National Institute of Arthritis, Metabolism, and Digestive Diseases				
RO1AM25433-01	Carbohydrate Metabolism in Diabetes	Appel, M. A.	Massachusetts U. Med. Sch. Worcester, MA	$ 51,501
RO1AM16367-06	Cyclic Nucleotide Phospho-diesterase	Appleman, M. M.	Southern California Univ. Los Angeles, CA	$ 40,164
RO1AM18350-06	Blood Brain Barrier and Carbohydrate Metabolism	Arieff, A. I.	California U. Med. Sch. San Francisco, CA	$ 60,407
RO1AM19625-03	Glucose 6-Phosphatase and Hepatic Glucose Production	Arion, W. J.	Cornell Univ. Vet. College Ithaca, NY	$ 55,366
RO1AM17776-05	Studies of Phosphopeptide Metabolism in Adipocytes	Avruch, J.	Massachusetts Gen. Hospital Boston, MA	$ 69,817
RO1AM20953-02	Control of Protein Synthesis in the Diabetic Rat	Beattle, D. S.	Mount Sinai Med. School New York, NY	$ 43,793
RO1AM21723-02	Metabolism and Function of Cyclic Nucleotides	Beavo, J. A.	Washington Univ. Med. Sch. Seattle, WA	$ 52,079
Z01AM54018-03 DD	Characterization of Metabolic and Morphologic Abnormalities in Diabetes	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 54,000
RO1AM05976-19	Carbohydrate and Ketone Body Metabolism	Bergman, E. N.	Cornell Univ. Vet. College Ithaca, NY	$ 160,517
RO1AM20443-03	Quantitative Studies of Metabolic Organ Dynamics	Bergman, R. N.	Northwestern University Evanston, IL	$ 83,269
RO1AM20979-02	Mixed Disulfides and Metabolic Control	Binkley, F.	Emory Univ. Med. School Atlanta, GA	$ 38,010
RO1AM17664-06	Hormonal Regulation of Gluco-neogenesis	Blair, J. B.	West Virginia U. Med. Sch. Morgantown, WV	$ 58,994
RO1AM21246-02	Regulation of Hepatic Production and Uptake of Glucose	Blumenthal, S. A.	New York State U. Med. Ctr. Syracuse, NY	$ 35,907

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM19691-03	Intracellular Protein Catabolism in Diabetes Mellitus	Bond, J. S.	Va. Cmnwlth. U. Med. Coll. Richmond, VA	$ 26,368
RO1AM23033-01A1	Alterations in the Cytoskeleton in Diabetes	Boyd, A. E., III	Baylor Coll. of Medicine Houston, TX	$ 70,488
RO1AM19655-03	Biochemical Basis of the Complications of Diabetes	Cerami, A.	Rockefeller University New York, NY	$ 92,908
RO1AM18243-05	Gluconeogenesis and Glycogenolysis: Role and Regulation	Cherrington, A. D.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 82,430
RO1AM18243-05S1	Gluconeogenesis and Glycogenolysis: Role and Regulation	Cherrington, A. D.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 25,507
RO1AM21081-03	Fuel and Amino Acid Metabolism in the Primate Brain	Chideckel, E. W.	University Hospital Boston, MA	$ 82,705
RO1AM19031-04	Liver Pyruvate Kinase	Cottam, G. L.	Texas University Dallas, TX	$ 53,031
RO1AM25235-02	Hormone Control of Plasma Membrane Redox Function	Crane, F. L.	Purdue Research Foundation Lafayette, IN	$ 58,335
RO1AM19606-03	Collagen Synthesis in "Diabetic" Fibroblasts	Cunningham, L. W.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 63,425
RO1AM20787-03	Protein Phosphatase in Normal and Diabetic Liver	Curnow, R.	Virginia Univ. Med. School Charlottesville, VA	$ 66,066
Z01AM70505-01EFS	Role of Dietary Carbohydrate and Fat in Regulating Rat Adipose Cell Function	Cushman, S. W.	NIAMDD, NIH Bethesda, MD	$ 24,000
RO1AM17403-06	Control Mechanisms of Glucose Metabolism in Fat Cells	Di Girolamo, M.	Emory University Med. Sch. Atlanta, GA	$ 68,662
RO1AM06878-17	Phlorizin Inhibition of Sugar Transport	Diedrich, D. F.	Kentucky Univ. Med. Coll. Lexington, KY	$ 57,981
RO1AM20882-02	Fructokinase Inhibitors on Fructose Utilization	Dills, W. L., Jr.	Cornell University Ithaca, NY	$ 37,039
RO1AM25804-01	PFK Regulatory Factor: Action, Structure, and Metabolism	Dunaway, G. A.	Southern Illinois Univ. Carbondale, IL	$ 50,518

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM07215-15	Hormonal Regulation of Hepatic Glucose Production	Dunn, A. S.	Southern California Univ. Los Angeles, CA	$ 54,252
RO1AM19796-03	The Regulation and Significance of Hepatic Cyclic GMP	Earp, H. S.	North Carolina U. Med. Sch. Chapel Hill, NC	$ 48,096
R23AM25778-01	Characterization of Islet Cell Surface Molecules	Eisenbarth, G. S.	Duke Univ. Med. Sch. Durham, NC	$ 43,400
RO1AM17587-05	Regulation of Mammalian Amino Acid Metabolism	Fahien, L. A.	Wisconsin Univ. Med. School Madison, WI	$ 55,867
RO1AM02244-21	Studies in Carbohydrate Metabolism	Fajans, S. S.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 120,683
RO1AM15332-07	Studies on UDP Glucose Dehydrogenase	Feingold, D. S.	Pittsburgh Univ. Med. Sch. Pittsburgh, PA	$ 62,170
RO1AM07902-17	Relation of Structure to Function of Enzymes	Fischer, E. H.	Washington Univ. Med. Sch. Seattle, WA	$ 156,542
RO1AM21099-02	Diabetic Ketoacidosis: Alterations in Mineral Metabolism	Fisher, J. N., Jr.	Tennessee Univ. Med. Coll. Memphis, TN	$ 47,065
RO1AM14632-16	Membranes and Organelles--Structure and Function	Fleischer, S.	Vanderbilt University Nashville, TN	$ 170,571
RO1AM10699-15	Control Mechanisms in Diabetes and Normal Metabolism	Freinkel, N.	Northwestern Univ. Med. Sch. Evanston, IL	$ 236,949
RO1AM18083-06	Role of Ion Fluxes in the Hypoglycemic Response	Friedman, N.	Texas Univ. Medical School Houston, TX	$ 58,253
RO1AM26873-01	Structure and Function of Hepatic Cellular Components	Garfield, S. A.	Cincinnati Univ. Med. Coll. Cincinnati, OH	$ 71,961
RO1AM25537-02	Regulation of Gluconeogenesis in Mammalian Liver	Hanson, R. W.	Case Wes. Reserve Med. Sch. Cleveland, OH	$ 108,323
RO1AM25703-01	Mitochondria Protein Degradation in Diabetic Rats	Hare, J. F.	Oregon Univ. Medical School Portland, OR	$ 46,122
RO1AM19995-03	Adipocyte Metabolism as Related to Cell Size	Hartman, A. D.	Louisiana St. U. Med. Sch. New Orleans, LA	$ 41,982

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM19850-04	Chemistry and Metabolism of Polysaccharides	Heath, E. C.	Iowa Univ. Medical College Iowa City, IA	$ 140,538
RO1AM09235-14	Inborn Errors of Carbohydrate Metabolism	Hers, H. G.	Catholic U. Med. Sch. Louvain, Belgium	$ 35,000
RO1AM19618-03	Characterization of a New Human Collagen	Hollister, D. W.	Harbor General Hospital Torrance, CA	$ 77,090
Z01AM54019-03DD	Cellular Metabolism in Diabetic and Nondiabetic Subjects	Howard, B. V.	NIAMDD, NIH Bethesda, MD	$ 81,000
RO1AM20815-02	Regulation of 2,3 Diphosphoglycerate in Erythrocytes	Isaacks, R. E.	Miami Univ. Med. School Coral Gables, FL	$ 30,671
RO1AM13499-11	Regulation of Liver Growth and Function	Jefferson, L. S., Jr.	Penn. St. Univ. Med. Sch. Hershey, PA	$ 84,646
RO1AM15658-09	Regulation of Skeletal Muscle Metabolism	Jefferson, L. S., Jr.	Penn. St. Univ. Med. Sch. Hershey, PA	$ 72,103
RO1AM18185-05	Regulation of Adenylate Cyclase and cAMP Metabolism	Johnson, R. A.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 90,121
RO1AM18284-03S1	Diabetes and Islet Cell Studies in the Primate	Jonasson, O.	Illinois Univ. Med. Coll. Chicago, IL	$ 27,744
RO1AM13376-11	Identification and Isolation of Sugar Transport Carrier	Jung, C. Y.	New York St. U. Med. Sch. Buffalo, NY	$ 53,787
RO1AM21177-02	Studies of Protein Glycosylation in Diabetes Mellitus	Karn, R. C.	Indiana Univ. Med. Sch. Indianapolis, IN	$ 41,493
RO1AM12604-11	Pathways of Glucose Metabolism and Hydrogen Transport	Katz, J.	Cedars Sinai Med. Center Los Angeles, CA	$ 94,206
RO1AM19576-03	Glycogen Metabolism by Isolated Hepatocytes	Katz, J.	Cedars Sinai Med. Center Los Angeles, CA	$ 59,832
RO1AM17897-05	The Metabolism and Function of the Polyprenols	Keenan, R. W.	Texas Univ. Med. Sch. San Antonio, TX	$ 38,923
RO1AM19912-04	Allosteric Properties of Phosphofructokinase	Kemp, R. G.	Chicago Medical School Chicago, IL	$ 69,681

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM17723-05	Membrane-Limited Metabolism in Mammalian Red Cells	Kim, H. D.	Arizona Univ. Medical Sch. Tucson, AR	$ 54,282
RO1AM21030-03	Development of Biochemical Markers for Diabetes Mellitus	Krotoszynski, B. K.	Ill. Inst. of Technology Chicago, IL	$ 104,597
RO1AM14485-08	Muscle Energy Metabolism	Kuschmerick, M. J.	Harvard Univ. Med. School Boston, MA	$ 82,166
RO1AM03373-21	Microenzymatic Studies of Islets of Langerhans	Lacy, P. E.	Washington Univ. Med. Sch. St. Louis, MO	$ 55,469
RO1AM14507-10	Carbohydrate and Lipid Metabolic Pathways	Landau, B. R.	Case West. Res. U. Med. Sch. Cleveland, OH	$ 123,977
RO1AM20378-03	Carbohydrate Metabolism and Catecholamines	Landsberg, L.	Beth Israel Hospital Boston, MA	$ 79,613
RO1AM10334-14	Control Processes in Mammalian Cells	Lardy, H. A.	Wisconsin Univ. Med. Sch. Madison, WI	$ 262,433
RO1AM20678-03	Regulation of Gluconeogenesis in Diabetes	Lardy, H. A.	Wisconsin Univ. Grad. Sch. Madison, WI	$ 43,048
RO1AM21224-02	Polyamine Metabolism in Diabetes	Levine, J. H.	S. Carolina Univ. Med. Sch. Charleston, SC	$ 52,501
RO1AM25336-01	The Monosaccharide Transport System of the Adipocyte	Lienhard, G. E.	Dartmouth Medical School Hanover, NH	$ 66,548
RO1AM22195-02	Glucose Regulation of Oral Protein Disposition	Liljenquist, J. D.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 95,401
RO1AM25270-03	Metabolism of Diabetic Heart Myocytes in Shock	Liu, M. A.	Bowman Gray Medical School Winston-Salem, NC	$ 53,588
RO1AM21621-02	Insulin Amino Acid Pools and Muscle Protein Synthesis	Low, R. B.	Vermont Univ. Med. College Burlington, VT	$ 66,064
RO1AM16162-07	Collagen Synthesis and Its Regulation	Lukens, L. N.	Wesleyan University Middletown, CT	$ 88,108
RO1AM17879-04	Hormones and Glucose Control in Juvenile Diabetics	MacGillivary, M. H.	Children's Hospital Buffalo, NY	$ 121,475
RO1AM21167-03	Control of Enzymes of Gluconeogenesis in Diabetic Mice	Marcus, F.	Chicago Medical School Chicago, IL	$ 42,737

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM22119-03	The Biochemistry of Extrapancreatic Glucoreceptor Cells	Matschinsky, F. M.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 81,444
RO1AM22122-02	Metabolism of Islets of Langerhans and Hormone Release	Matschinsky, F. M.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 95,559
RO1AM27017-01	Diffraction Analysis of Fructose-1, 6-Diphosphatase	McPherson, A.	Calif. Univ. Agric. Coll. Riverside, CA	$ 2,095
RO1AM21225-03	Diabetes Mellitus and Plasma Glycoprotein	Miller, L. L.	Rochester Univ. Med. Sch. Rochester, NY	$ 30,216
RO1AM21145-02	Glutamine Synthetase in Cultured 3T3-L1 Adipocytes	Miller, R. E.	Case West. Res. Med. Sch. Cleveland, OH	$ 52,455
RO1AM18222-05	Human Procollagen Structure and Function	Mitchell, W. M.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 74,853
RO1AM20870-02	Short-Loop Feedback Control of Pituitary Hormones	Molitch, M. E.	New England Med. Ctr. Hosp. Boston, MA	$ 72,211
RO1AM21624-02	Mechanism and Regulation of Protein Turnover in Liver	Mortimore, G. E.	Pa. St. Univ. Med. Sch. Hershey, PA	$ 121,374
RO1AM07141-17	Liver Pyrophosphate-Phosphotransferase Activities	Nordlie, R. C.	North Dakota U. Med. Sch. Grand Forks, ND	$ 76,349
RO1AM13927-10	Intestinal Mucosal Function in Diabetes	Olsen, W. A.	Wisconsin Univ. Med. Sch. Madison, WI	$ 24,806
RO1AM19473-04	Regulation of Energy Metabolism in Liver	Olson, M. S.	Texas University Med. Sch. San Antonio, TX	$ 40,428
RO1AM25386-01	Human Metabolism in Diabetic Ketoacidosis	Owen, W. E.	Temple Univ. Med. Sch. Philadelphia, PA	$ 89,455
RO1AM21762-02	Skeletal Muscle Amino Acid Metabolism	Pardridge, W. M.	Calif. Univ. Med. Sch. Los Angeles, CA	$ 44,894
RO1AM21296-02	Bone Mass and Bone Cell Function in Diabetes Mellitus	Parfitt, A. M.	Henry Ford Hospital Detroit, MI	$ 44,367
RO1AM21483-02	Metabolic Fuels, Diabetes, and Somatomedin Activity	Phillips, L. S.	Northwestern U. Med. Sch. Chicago, IL	$ 66,625
RO1AM18270-05	Hormonal Control of Hepatic Gluconeogenesis	Pilkis, S. J.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 100,135

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM23001-02	Hexose Transport and Phosphorylation in Animal Cells	Plagemann, P. G.	Minnesota Univ. Med. School Minneapolis, MN	$ 62,507
RO1AM15404-09	Regulation of Pathways of Intermediary Metabolism	Plaut, G. W.	Temple Univ. Med. School Philadelphia, PA	$ 110,114
RO1AM13527-09	Metabolic Substrate Utilization in Man	Reichard, G. A., Jr.	Lankenau Hospital Philadelphia, PA	$ 124,299
RO1AM18320-05	Regulation of Mammalian Pyruvate Dehydrogenase	Roche, T. E.	Kansas State University Manhattan, KS	$ 39,362
RO1AM20417-02	Metabolic Pathways in the Intact Liver Cell	Rognstad, R. A.	Cedars Sinai Med. Center Los Angeles, CA	$ 30,260
RO1AM21437-02	Pyruvate Cycles in the Metabolism of Glucogenic Cells	Rognstad, R. A.	Cedars Sinai Med. Center Los Angeles, CA	$ 51,630
RO1AM17320-16	Regulation of Carbohydrate Metabolism	Rose, I. A.	Institute for Cancer Res. Philadelphia, PA	$ 69,105
RO1AM21811-02	Control of Hexokinase Loss in Diabetes	Rose, I. A.	Institute for Cancer Res. Philadelphia, PA	$ 46,897
R01AM09038-15	Proteins Involved in the Action of Cyclic AMP	Rosen, O. M.	A. Einstein Med. Coll. Bronx, NY	$ 119,476
RO1AM21309-03	Biochemical Characterization of Diabetic Fibroblasts	Rowe, D. W.	Connecticut Univ. Med. Sch. Farmington, CT	$ 47,926
RO1AM19514-03A1	Glucose and Amino Acid Metabolism in Skeletal Muscle	Ruderman, N. B.	University Hospital Boston, MA	$ 110,510
Z01AM70500-01EFS	Studies on Insulin's Regulation of Glucose Metabolism by Adipose Cells	Salans, Lester B.	NIAMDD, NIH Bethesda, MD	$ 199,000
RO1AM21431-03	The Action of Calcium on Adipose Tissue	Schimmel, R. J.	NJ Coll. of Med. and Dent. Jersey City, NJ	$ 40,987
RO1AM10451-14	Enzyme Secretion and Its Metabolic Control	Schramm, M.	Hebrew University Jerusalem, Israel	$ 73,811
RO1AM20865-02	Role of Myoinositol Metabolism in Pancreatic Secretion	Slaby, F. J.	George Wash. U. Med. Sch. Washington, DC	$ 64,363

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM18045-06	Regulation of Total COA Levels in Heart and Liver	Smith, C. M.	Temple University Med. Sch. Philadelphia, PA	$ 81,315
RO1AM17299-07	Induction and Suppression of Urea Cycle Enzymes	Snodgrass, P. J.	Indiana Univ. Med. School Indianapolis, IN	$ 59,504
RO1AM17808-05	Regulation of Glycogen Synthase Kinases and and Phosphatase	Soderling, T. R.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 76,268
RO1AM24098-02	Diabetes: Sugar Fluxes in Internally Perfused Muscle	Spangler, S. G.	Alabama University Med. Sch. Birmingham, AL	$ 51,605
RO1AM23009-01A1	Complex Carbohydrates in Diabetes	Spiro, M. J.	Joslin Diabetes Fdn. Inc. Boston, MA	$ 86,038
RO1AM23012-02	Metabolic Products in Diabetes: GC-MS Quantitation	Sweeley, C. C.	Michigan St. Univ. Med. Sch. Lansing, MI	$ 48,925
RO1AM21277-02	Control of Glycogen Synthase by Protein Modification	Tan, A. W.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 39,128
RO1AM22013-02	Metabolism of Liver MRNA in Diabetes	Taylor, J. M.	Penn. St. Univ. Med. Sch. Hershey, PA	$ 42,831
RO1AM05410-18	Adaptation of Membrane-Associated Functions	Tepperman, J.	New York St. U. Med. Ctr. Syracuse, NY	$ 103,431
RO1AM19496-02	Control of Glycolysis and Gluconeogenesis: PFK-FDPASE	Trujillo, J. L.	New Mexico University Albuquerque, NM	$ 54,631
RO1AM18178-03	Structural Requirements of Islet Glucose Receptors	Tyler, J. M.	Georgia Med. College Augusta, GA	$ 41,966
RO1AM20478-02	Inborn Errors of Pyruvate Metabolism	Utter, M. F.	Case West. Res. U. Med. Sch. Cleveland, OH	$ 100,288
RO1AM21859-02	Structure and Function of PEP Carboxykinase Isozymes	Utter, M. F.	Case West. Res. U. Med. Sch. Cleveland, OH	$ 73,258
RO1AM16319-05S1	Hormonal Regulation of Gluconeogenesis in Hepatocytes	Veneziale, C. M.	Mayo Foundation Rochester, MN	$ 4,400
RO1AM13613-11	Regulation of Cell Function by Phosphorylation	Walsh, D. A.	California Univ. Med. Sch. Davis, CA	$ 129,546

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM21019-02	A Protein Inhibitor of Protein Kinases	Walsh, D. A.	California Univ. Med. Sch. Davis, CA	$ 69,834
Z01AM70500-01EFS	Characterization of the Glucose Transport System in the Adipose Cell	Wardzala, L. J.	NIAMDD, NIH Bethesda, MD	$ 49,000
RO1AM21307-02	Phospofructokinase in Normal and Diabetic States	Younathan, E. S.	Louisiana State University Baton Rouge, LA	$ 54,426
RO1AM25192-02	Diffraction Analysis of Fructose-1,6-Diphosphatase	Weeks, C. M.	Medical Fdn. of Buffalo Buffalo, NY	$ 62,125
National Institute of Child Health and Human Development				
K0400226-02	Development and Control of Hepatic and Renal Gluconeogenesis	Arinze, I. J.	Meharry Medical College Nashville, TN	$ 34,108
RO108792-05	Development of Carbohydrate and Lipid Metabolism in Liver	Arinze, I. J.	Meharry Medical College Nashville, TN	$ 48,040
RO110667-03	Stable Isotope Studies of Fuel Transport in Children	Bier, D. M.	Washington University University City, MO	$ 83,437
Z0100401-01	Disorders of Carbohydrate Metabolism	Cornblath, M.	NICHD, NIH Bethesda, MD	$ 193,883
RO107788-05	Glycogen Synthase in Developing Liver	Gold, A. M.	St. Louis University St. Louis, MO	$ 41,065
NO182818-02	Relative Risk of Diabetes in Users of Contraceptives	Hall, W. D., Jr.	Emory University Atlanta, GA	$ 146,000
RO107516-06	Regulation of Fatty Acid Synthesis in Neonatal Liver	Joshi, V. C.	Baylor College of Medicine Houston, TX	$ 76,412
K0400278-05	Endocrine Regulation of Carbohydrate Metabolism	Sperling, M. A.	Childrens Hosp. Med. Center Cincinnati, OH	$ 37,908
RO106291-07A1	Ketone Metabolism in Developmental Homeostasis	Tildon, J. T.	University of Maryland College Park, MD	$ 71,340
RO112959-01	Estrogen-Glucagon Interactions in Hepatic Metabolism	Weinstein, I.	University of Missouri Columbia, MO	$ 70,826

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of General Medical Sciences				
GM21700	Burn Trauma Center	Burke, J.	Mass. General Hospital Boston, MA	$ 45,191
GM25043	Metabolic Basis for Homeostasis in Shock	Drucker, W.	University of Rochester Rochester, NY	$ 103,680
GM23870	Endocrine and Metaboic Response to Shock and Trauma	Egdahl, R.	Boston University Boston, MA	$ 100,750
GM23065	Metabolic Response to Trauma	Long, C.	Medical College of Ohio Toledo, OH	$ 27,539
GM22085	Surgical Care: Metabolism and Biorhythms	Moore, F.	Harvard University Cambridge, MA	$ 71,840
GM14033	Control Mechanisms in Glyco-neogenesis	Shargo, E. S.	University of Wisconsin Milwaukee, WI	$ 52,808
GM21361	Biological Role of Cyclic Nucleotide Phosphodiesterases	Thompson	U. of Texas, Hlth. Sci. Ctr. Houston, TX	$ 85,802
GM22825	Mechanism of Insulin Resistance after Burns	Turinsky, J.	Albany Medical College Albany, NY	$ 30,912
National Institute of Neurological and Communicative Disorders and Stroke				
RO1NS15708-02	Seizures, Ketosis and Cerebral Metabolism (Rats)	De Vivo, D. C.	Columbia University New York, NY	$ 41,500
RO1NS13597-03	Metabolism in the Brain (Dogs)	Drewes, L. R.	University of Minnesota Minneapolis, MN	$ 36,300
Z01NS01309-13	Biosynthesis and Function of Glycosphingolipids and Other Glycoconjugates	Fishman, P.	NINCDS, NIH Bethesda, MD	$ 141,640
RO1NS05961-14	Metabolism of the Brain (Dogs)	Gilboe, D. D.	University Hospitals Madison, WI	$ 41,500
RO1NS05979-14	Krebs Cycle and Cyclic Nucleotide Control (Mice, Rats, Guinea Pigs)	Goldberg, N. D.	University of Minnesota Minneapolis, MN	$ 22,000

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
PO1NS14867-01	Cognitive Activity and Cerebral Glucose Consumption in Normal and TIA Patients	Gur, R. C.	University of Pennsylvania Philadelphia, PA	*
PO1NS14867-1	Effect of Somatosensory Stimulation on Local Cerebral Glucose Utilization (Human)	Hand, P. J.	University of Pennsylvania Philadelphia, PA	*
RO1NS12578-04	Brain Enzymes and Inactivation of Peptidyl Hormones (Rats, Primates)	Marks, N.	Rockland Research Institute Orangeburg, NY	$ 8,600
RO1NS07507-13	Cerebral Metabolism and Blood Flow During Anesthesia (Human, Dogs, Mice, Monkeys)	Michenfelder, J. D.	Mayo Foundation Rochester, MN	$ 19,500
PO1NS14867-01	Local Cerebral Glucose Metabolism in Man	Reivich, M.	University of Pennsylvania Philadelphia, PA	$ 478,700
PO1NS14867-01	Cerebral Glucose Utilization Produced by Visual Stimulation (Human)	Rosenquist, A. C.	University of Pennsylvania Philadelphia, PA	*
RO1NS10974-03	Treatment of Postischemic-anoxic Encephalopathy (Monkeys)	Safar, P.	University of Pittsburgh Pittsburgh, PA	$ 79,300
RO1NS06163-14	Cerebral Metabolism in Newborn and the Young (Mice)	Thurston, J. H.	Washington University St. Louis, MO	$ 53,500
RO1NS15660-01	Glucocorticoids in Epilepsy and Neurologic Disorders (Mice)	Thurston, J. H.	Washington University St. Louis, MO	$ 73,200
RO1NS13515-03	Brain Development in Experimental Epilepsy (Rats, Rabbits)	Westerlain, C. G.	VA Hopital Sepulveda, CA	$ 21,300

* Denotes subdivision of a major research project study whose dollar value has already been accounted for in this analysis.

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
U.S. Department of Agriculuture				
0077021	Endocrine Regulation of Carcass Composition in Swine	Althen, T. G.	Mississippi State University State College, MS	*
0068800	Glucose 6-Phosphatase and Carbohydrate Metabolism	Arion, W. J.	Cornell University Ithaca, NY	*
0073000	Factors Regulating Protein, Synthesis, Degradation, and Growth in Skeletal Muscle	Gall, D. E.	University of Arizona Tuscon, AZ	*
0077564	Insulin and Protein Turnover in Animal Tissues	Hansen, R. J.	University of California Davis, CA	*
0027365	Effect of Diet and Hormones on Enzymes and Metabolism	Harper, A. E.	University of Wisconsin WI	*
0042002	Parameters of Carbohydrate Sensitivity	Michaelis, O. E.	Human Nutrition Center	$ 199,153
0068723	Importance of Dietary Arginine Intake on Carbohydrate Metabolism	Milner, J. A.	University of Illinois Urbana, IL	*
0076903	Varying Levels of Stress on Intramuscular Penetration with Glucose-1-13c in Normal and Diabetic Rats	Peth, S. B.	Lincoln University	*
Veterans' Administration				
57835571-2	The Glucose Facilitatory Effect in Several Metabolic States	Abraira, C.	VAMC Hines Chicago, IL	*
59635414-1	Control of Carbohydrate Metabolism in Animals and Humans	Anderson, J.	VAMC Lexington, KY	*
69111406-1	Glucose and Fat Metabolism in Diabetes and Cancer	Baker, N.	VAMC Wadsworth Los Angeles, CA	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
67035164-1	Regulation of Production and Uptake of Glucose by the Liver	Blumenthal, S.	VAMC Syracuse, NY	*
67025248-1	Control of Energy Metabolism in Mammalian Tissues	Bowman, R.	VAMC Syracuse, NY	*
66343217-1	Mechanisms of Decreased Glucose Tolerance in the Aged	Chen, M.	VAMC Seattle, WA	*
52133990-1	Studies of Myoinositol Metabolism in Man	Clements, R.	VAMC Birmingham, AL	*
68921987-1	Portacaval Anastomosis in Cirrhotic Patients with Esophageal Varices and Ascites	Conn, H.	VAMC West Haven, CT	*
57338295-1	Effects of Phosphorus Depletion on Skeletal and Cardiac Muscle	Fuller, T.	VAMC Gainesville, FL	*
63635974-1	*In Vitro* Glycolysis in Nondiabetic and Diabetic Humans	Fusaro, R.	VAMC Omaha, NB	*
58041527-2	The Role of Gluconeogenesis in the Hyperglycemia of Diabetes Mellitus	Garber, A.	VAMC Houston, TX	*
61231130-1	Studies of Human Pancreatic Proteases	Geokas, M.	VAMC Martinez, CA	*
52831070-1	An Investigation of Hypothalamic Control of Metabolism	Goldman, J.	VAMC Buffalo, NY	*
63243421-1	Senile Amyloidosis - Biochemical Studies and Immunohistochemistry	Gorevic, P.	VAMC Northport, NY	*
58442999-5	Insulin Regulation of Specific Protein Synthesis	Granner, D.	VAMC Iowa City, IA	*
54140205-1	Carnitine Metabolism in Human Ketogenesis	Hoppel, C.	VAMC Cleveland, OH	*

* Funding information not available.

INTERMEDIARY CARBOHYDRATE AND PROTEIN METABOLISM (Cont'd)

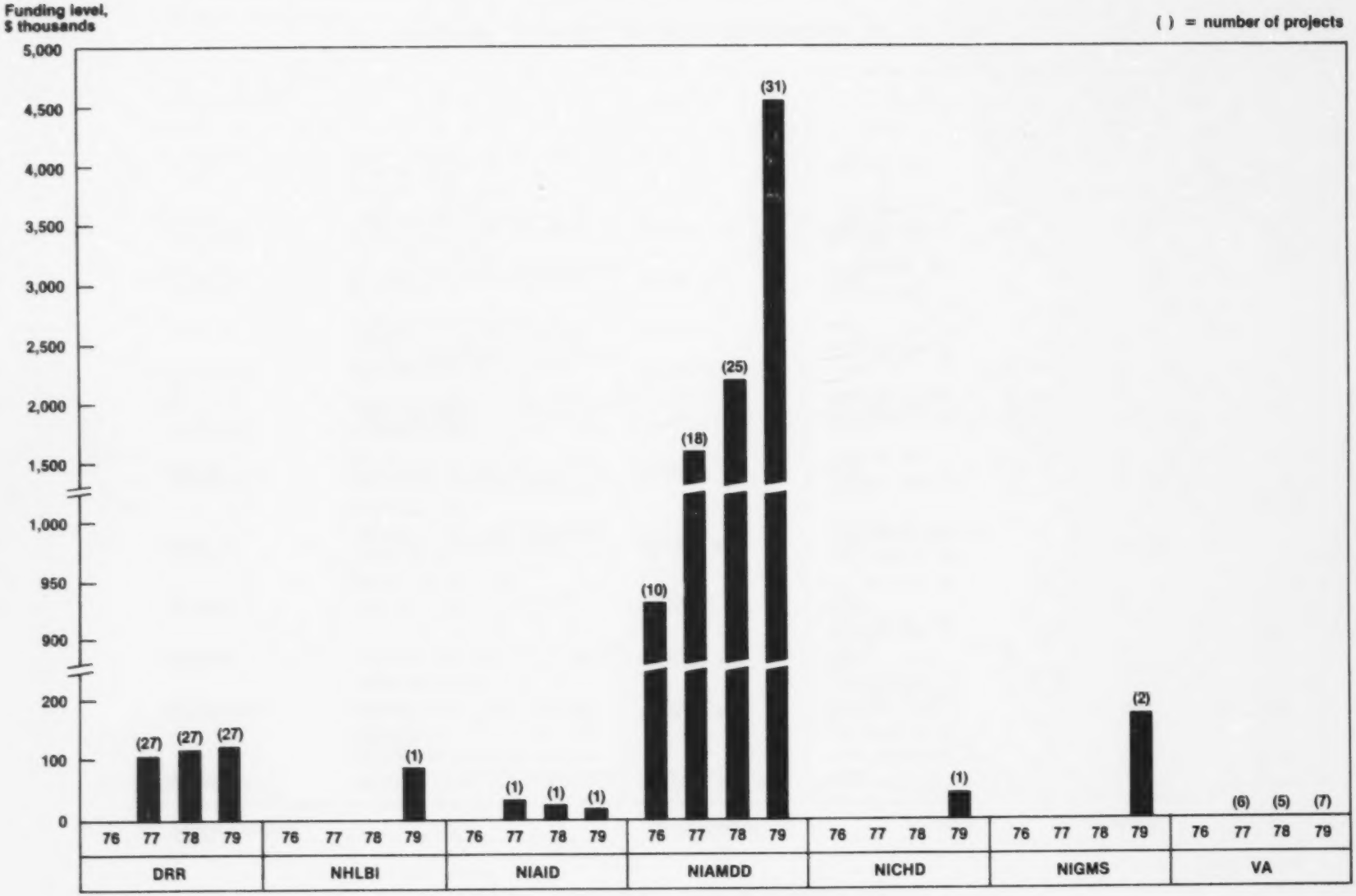
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
52827230-4	Identification and Isolation of Sugar Transport Carrier of Human Red Cell Membranes	Jung, C.	VAMC Buffalo, NY	*
52832216-1	Reconstitution of Glucose Transport System	Jung, C.	VAMC Buffalo, NY	*
55436197-1	The Defense of pH in Metabolic Acidosis	Kaehny, W.	VAMC Denver, CO	*
54941302-7	Derangements of Carbohydrate and Lipid Metabolism Incident to Potassium	Knochel, J.	VAMC Dallas, TX	*
69141335-4	Uptake and Release of Amino Acids and Energy Substrates by Skeletal Muscle	Kopple, J.	VAMC Wadsworth Los Angeles, CA	*
51833563-1	Factors Affecting Protein Synthesis Including Aging and Antibiotics	Kurtz, D.	VAMC Bedford, MA	*
69140433-9	Role of the Endocrine Pancreas in the Altered Carbohydrate Metabolism in Aging	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
52139887-3	Clinical Studies of Gluconeogenesis	McDaniel, H.	VAMC Birmingham, AL	*
61840470-3	Regulation of Heart Glycogen Synthase Activity	Nuttall, F.	VAMC Minneapolis, MN	*
61840471-4	Regulation of Liver Synthase Phosphatase and Phosphorylase Phosphatase	Nuttall, F.	VAMC Minneapolis, MN	*
53534888-1	The Disposition of Polypeptides in Single Nephrons in the Rat	Pullman, T.	VAMC Lakeside Chicago, IL	*
64038235-3	Effect of Age on Insulin Resistance and Plasma Glucose and Triglycerides	Reaven, G.	VAMC Palo Alto, CA	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
66230881-1	Kinetics of Energy Metabolites in Humans, Diabetes and Drug Action	Searle, G.	VAMC San Francisco, CA	*
53735729-1	Factors Controlling Carbohydrate Metabolism	Shah, J.	VAMC West Side Chicago, IL	*
5329893-1	Membrane Metabolism in Diabetes	Silbert, C.	VAMC Boston, MA	*
5635783-2	Effect of Ethanol On Carbohydrate Metabolism	Singh, S.	VAMC N. Chicago, IL	*
63241076-11	Tolerance and Physiologic Effects of 10% Maltose Given Intravenously	Soroff, H.	VAMC Northport, NY	*
54938418-3	Alpha-Ketoglutarate Dehydrogenase Complex	Srere, P.	VAMC Dallas, TX	*
54943718-5	Alpha-Ketoglutarate Dehydrogenase Complex of Rat and Liver	Srere, P.	VAMC Dallas, TX	*
64631768-1	Myocardial Utilization of Infused Hypertonic Glucose With 14C-Glucose Tracer Transfer During Hemorrhagic Shock	Stremple, J.	VAMC Pittsburgh, PA	*
59638303-1	Pathophysiology of Gut Metabolism in Hepatic Encephalopathy	Weber, F.	VAMC Lexington, KY	*
53041706-6	Tryptophan in the Treatment of Dystonia Musculorum Deformans	Yuwiler, A.	VAMC Brentwood Los Angeles, CA	*

* Funding information not available.

Transplantation and Artificial Devices (B 6)



PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
R01HL11945-11	Synthesis of Artificial Lung and Kidney Systems	Galletti, P. M.	Brown University Providence, RI	$ 81,597
National Institute of Allergy and Infectious Diseases				
R01AI12184	T Cell Subpopulation in Transplant Immunity	Cantor, H.	Sidney Farber Cancer Inst. Boston, MA	$ 18,318
National Institute of Arthritis, Metabolism, and Digestive Diseases				
N01AM92201	Portable Insulin Delivery Systems for Diabetes	Albisser, A. M.	Hospital for Sick Children Toronto, Canada	$ 603,774
R01AM21050-02	Human Fetal Islets: Preservation and Insulin Receptor	Archer, J. A.	Howard Univ. Med. Coll. Washington, DC	$ 73,572
R01AM17188-06	Islet Transplantation Utilizing Immuno-Isolation	Ballinger, W. F.	Washington Univ. Med. Sch. St. Louis, MO	$ 100,416
R01AM18115-05	Cryobiology of Isolated Islets of Langerhans	Bank, H. L.	S. Carolina Univ. Med. Sch. Charleston, SC	$ 67,751
R01AM17980-05	Endocrine Function of Transplanted Fetal Pancreas	Beown, J.	California Univ. Med. Sch. Los Angeles, CA	$ 94,637
R01AM17697-06	Islet Transplantation and Diabetic Vascular Disease	Brown, D. M.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 91,772
N01AM92217	Open-Loop Insulin Delivery Device	Buchwald, H.	Univ. of Minnesota Minneapolis, MN	$ 561,090
R01AM15398-09	Pancreatic Islet and Beta Cell Studies	Chick, W. L.	Joslin Diabetes Fdn., Inc. Boston, MA	$ 146,800
R01AM21222-03	Studies Towards Development of an Artificial Pancreas	Chick, W. L.	Joslin Diabetes Fdn., Inc. Boston, MA	$ 105,560
R01AM21861-02	High Yield Isolation Animal/ Human Pancreatic Islets	Dobelle, W. H.	Col. U. Coll. of Phys./Surg. New York, NY	$ 131,363

TRANSPLANTATION AND ARTIFICIAL DEVICES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM12763-10	Pancreatic Islet Function in Diabetes	Forsham, P. H.	California Univ. Med. Sch. San Francisco, CA	$ 87,832
R01AM19899-03	Fetal Pancreatic Transplantation	Hegre, O. D.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 78,339
R01AM26695-02	Endogenous and Exogenous Insulin in Diabetes Mellitus	Horwitz, D. L.	Pritzker Sch. of Med. Chicago, IL	$ 60,812
R01AM18284-04	Diabetes and Islet Cell Studies in the Primate	Jonasson, O.	Illinois Univ. Med. Coll. Chicago, IL	$ 217,183
R01AM01226-23	Tissue Culture of the Islets of Langerhans	Lacy, P. E.	Washington Univ. Med. Sch. St. Louis, MO	$ 49,217
R01AM20827-03	Immune Aspects in Fetal Pancreas Allografts	Mullen, Y. S.	UCLA Dental School Los Angeles, CA	$ 45,050
R01AM16566-06	Isolation and Transplantation of Pancreatic Islets	Najarian, J. S.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 126,475
NO1AM92202	Develop Portable Open-Loop Devices for Diabetes	Olson, R. K.	Univ. of Pittsburgh Pittsburgh, PA	$ 98,786
R01AM20745-03	Studies of Pancreas Transplantation in Diabetes	Orloff, M. J.	Cal. U./San Diego Med. Sch. La Jolla, CA	$ 172,163
R01AM21973-02	Electrophysiological Studies of Cultured Islet Cells	Pace, C. S.	Alabama Univ. Med. College Birmingham, AL	$ 55,870
N01AM92200	Devices for Improved Management of Diabetes	Parsons, J. A.	Medical Research Council London, England	$ 258,838
R01AM20756-03	Effects of Pancreatic Islet Transplantation	Reckard, C. R.	Chicago Univ. Med. Sch. Chicago, IL	$ 62,348
R01AM21966-02	Isolation and Purification of Beta Cells of Pancreas	Scharp, D. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 57,898
R01AM25585-01	Mass Isolation of Viable Mammalian Islets	Scharp, D. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 106,474
R01AM26083-01	Diabetic Complications: Effect of Islet Transplantation	Scharp, D. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 104,650

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01AM82218	Devices for Improved Management of Diabetes	Service, F. J.	Mayo Foundation Rochester, MN	$ 196,649
R01AM18352-04	The Development of an Implantable Glucose Sensor	Soeldner, J. S.	Joslin Diabetes Fdn., Inc. Boston, MA	$ 327,042
R01AM25251-02	Studies with Liposome-Entrapped Insulin	Sperling, M. A.	Children's Hospital Cincinnati, OH	$ 51,441
R01AM19269-04	Pancreatic Islet Transplantation in Diabetic Patients	Sutherland, D. E.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 104,421
R01AM24065-01	Comparison of Pancreas and Islet Transplantation	Sutherland, D. E.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 23,279
National Institute of Child Health and Human Development				
K040028501	Developmental Interaction/ Gep System/In Vivo/In Vitro	McEvoy, R. C.	City Univ. of New York New York, NY	$ 39,528
National Institute of General Medical Sciences				
GM22952	Sensitive Field - Effect Transducers	Janata	University of Utah Salt Lake City, UT	$ 104,196
GM16133	Immobilized Enzymes to Alter and Analyze Metabolism	Updike, S. J.	Univ. of Wisconsin	$ 67,281
Veterans' Administration				
50942396-2	Insulin Secretion from Isolated Beta Cells	Bandisode, M.	VAMC Augusta, GA	*
60543667-1	Studies on Prolongation of Survival and Function of Pancreatic Islets in Amelioration Diabetes	Hinshaw, D.	VAMC Loma Linda, CA	*

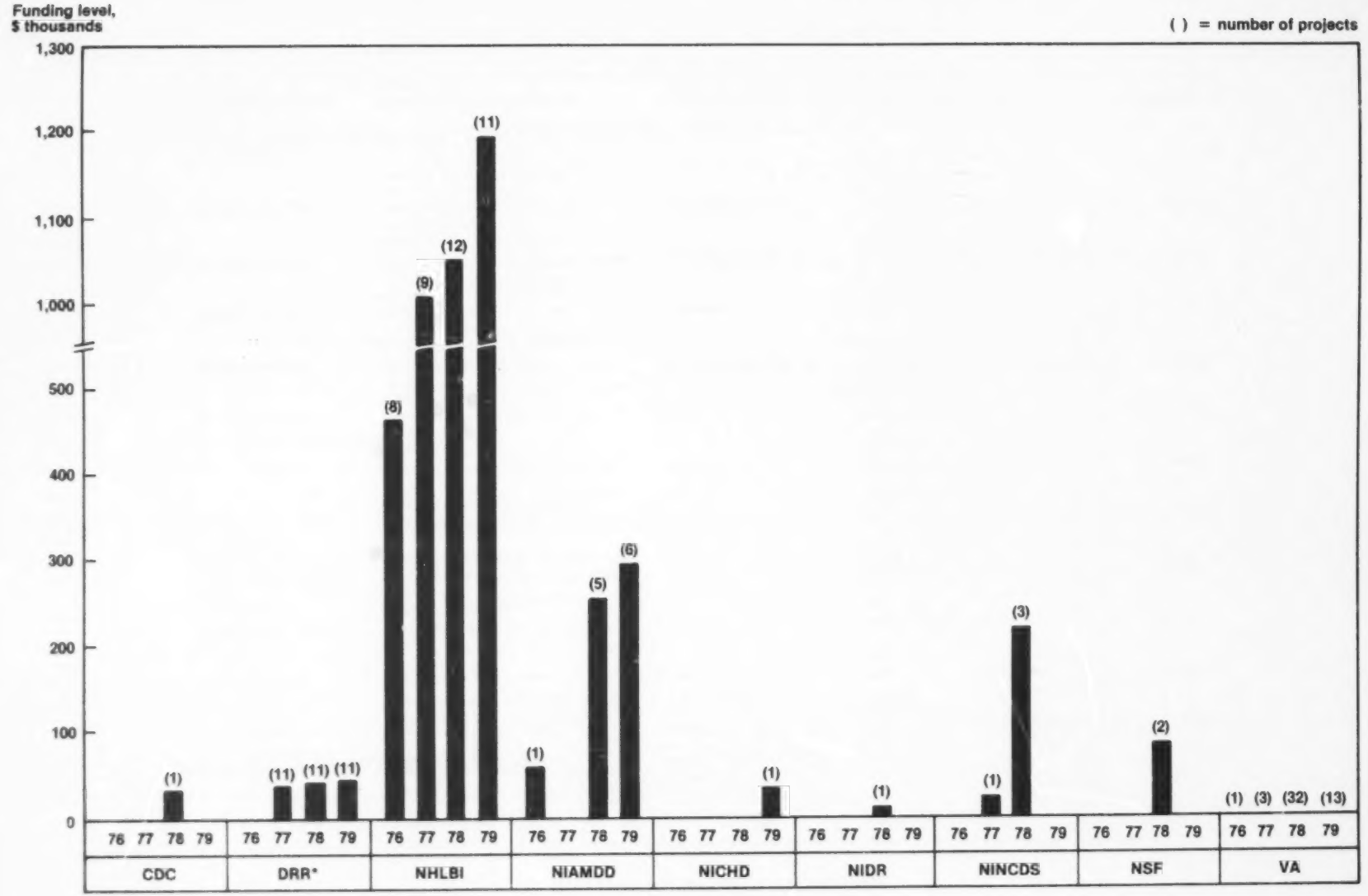
* Funding information not available.

TRANSPLANTATION AND ARTIFICIAL DEVICES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
54626645-2	Islet Cell Isolation and Transplantation	Hutson, D.	VAMC Miami, FL	*
52723100-2	Pancreatic Secretion	LeVeen, H.	VAMC Brooklyn, NY	*
61840462-9	Segmental Duct Ligated Pancreatic Allotransplantation	Miller, J.	VAMC Minneapolis, MN	*
60340782-2	Control of Pancreatic Insular Secretions	Samols, E.	VAMC Louisville, KY	*
54940215-7	Reversal of Experimental Diabetes in Rats by Transplantation of Normal Islets from Non-Related Donors	Seltzer, H.	VAMC Dallas, TX	*

* Funding information not available.

Nonhormonal Blood Factors, Platelets, and Coagulation (B 7)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

NON-HORMONAL BLOOD FACTORS, PLATELETS, AND COAGULATION

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
R01HL13629-09	Hemorrhagic Diseases	Aster, R. H.	Milwaukee Blood Center Milwaukee, WI	$ 45,244
R01HL13629-10	Hemorrhagic Diseases	Aster, R. H.	Milwaukee Blood Center Milwaukee, WI	$ 123,200
R01HL20520-0391	Protein Modification and Diabetic Sequelae	Cerami, A.	Rockefeller University New York, NY	$ 4,734
R01HL20539-0391	Blood Glucose, HGB A1C, and Diabetic Vascular Disease	Gabbay, K. H.	Children's Hosp. Med. Ctr. Boston, MA	$ 52,761
R01HL20539-0392	Blood Glucose, HGB A1C, and Diabetic Vascular Disease	Gabbay, K. H.	Children's Hosp. Med. Ctr. Boston, MA	$ 1,102
R01HL20539-04	Blood Glucose, HGB A1C, and Diabetic Vascular Disease	Gabbay, K. H.	Children's Hosp. Med. Ctr. Boston, MA	$ 355,849
R01HL16634-14	Function of Platelets and Coagulation Factors	Majerus, P. W.	Washington University St Louis, MO	$ 168,519
R01HL13036-09	Coronary Thrombosis: Pathogenesis and Diagnosis	Moschos, C. B.	N.J. Coll. of Med. and Dent. Newark, NJ	$ 74,265
P50HL18828-04	Specialized Center of Research in Thrombosis	Nachman, R. L.	Cornell Univ. Med. Ctr. Ithaca, NY	$ 316,578
R01HL23560-01	Platelet Aggregation in Brain Vessels of Diabetic Mice	Rosenblum, W. I.	Virginia Commonwealth Univ. Richmond, VA	$ 47,225
P01HL1414-11S1	A Program in Thrombosis and Atherosclerosis	Salzman, E. W.	Beth Israel Hosp. Brookline, MA	$ 1,135
National Institute of Arthritis, Metabolism, and Digestive Diseases				
Z01AM545021-02DD	Hemoglobin Al Levels in Diabetes	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 54,000
R01AM18223-05	Hemoglobin A1C in Patients with Diabetes Mellitus	Bunn, F. H.	Peter Bent Brigham Hosp. Boston, MA	$ 73,741
R01AM20727-02	Erythrocyte and Platelet Aggregation in Diabetes	Gear, A. R.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 35,251

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM25715-01	Chromium (III) Complexes and Glucose Tolerance	Leong, J.	Calif. Univ., San Diego La Jolla, CA	$ 68,870
R01AM20387-03	Factors Modifying Blood Platelet Function in Diabetics	Sprecher, H. W.	Ohio St. Univ. Med. Sch. Columbus, OH	$ 79,619
R01AM20830-02	Relationship of Tissue Levels of Chromium to Diabetes	Vanderlinde, R. E.	Hahnemann Medical College Philadelphia, PA	$ 39,590
National Institute of Child Health and Human Development				
P010993805001	Ontogeny of Cells in Immune Response in Fetus and Neonate	Fudenberg, H. H.	Medical Univ. of Charleston Charleston, SC	$ 31,900
Veterans' Administration				
54040904-2	Diagnostic and Prognostic Value of the Determination of Hemoglobin Components in Patients with Diabetes Mellitus	Anido, V.	VAMC Clarksburg, WV	*
54636657-1	Physiologic Responses of the Developing Organism to Life-Threatening Challenges	Arango, A.	VAMC Miami, FL	*
53540061-1	Antithrombin III in Platelets and in Patients with Diabetes and Carcinoma	Czaper, E.	VAMC Lakeside Chicago, IL	*
65743428-1	Fibrinogen Catabolism in Diabetes and Atherosclerosis	Fletcher, A.	VAMC St. Louis, MO	*
632424448-7	Collagenase Activity of Leukocytes from Diabetic Rats and Humans	Gollapudi, G.	VAMC St. Louis, MO.	*
53733155-3	Cooperative Study of the Pathogenicity of the Sickle Cell Trait and G-6-PD	Heller, P.	VAMC West Side Chicago, IL	*

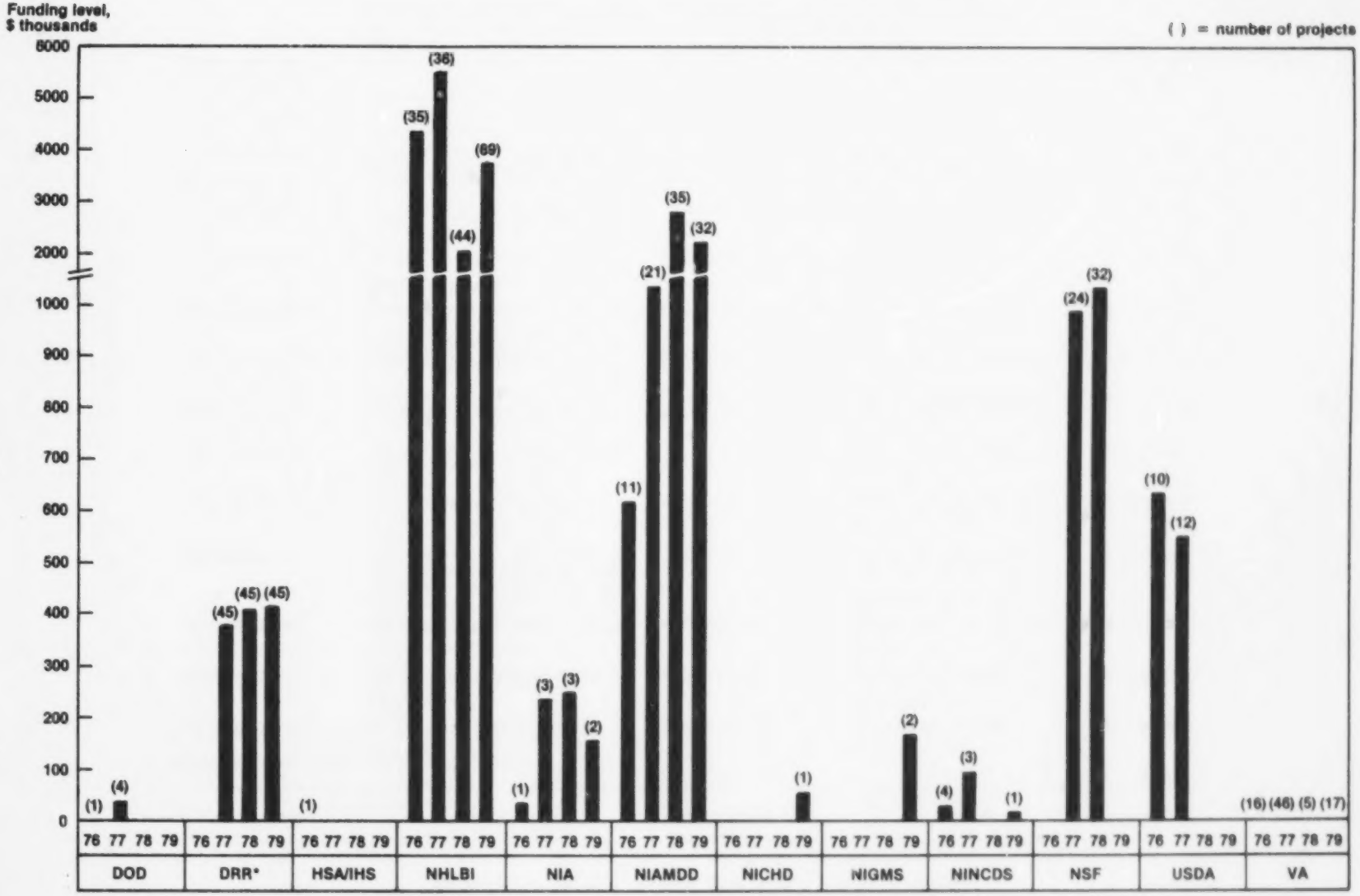
* Funding information not available.

NON-HORMONAL BLOOD FACTORS, PLATELETS, AND COAGULATION (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
54933592-3	The Pathophysiology of the Alcoholic Myopathy-II. Pathophysiology of K. Deficiency	Knochel, J.	VAMC Dallas, TX	*
67337998-1	Characterization of the Isulin Receptor of the Human Lymphocyte	Pollet, R.	VAMC Tampa, FL	*
53438063-1	Platelet Function in Diabetes Mellitus	Sarji, K.	VAMC Charleston, SC	*
53440902-2	Von Willebrand Factor, Vitamin C, and Platelet Aggregation	Sarji, K.	VAMC Charleston, SC	*
69040645-23	Antiplatelet Aggregating Agents in Diabetic Lower Extremity Vascular Diseases (VA Cooperative Study)	Sasahara, A.	VAMC W. Roxbury, MA	*
64239850-2	The Role of pH and Bicarbonate on Potassium Distribution - A Kinetic Analysis	Sterns, R.	VAMC Philadelphia, PA	*
68040951-2	A Comparative Immunoelectrophoretic Study of Blood Serum Proteins in Normal and Abnormal Subjects and Subjects with Sickle Cell Trait	Watts, G.	VAMC Tuskegee, AL	*

* Funding information not available.

Lipid Metabolism, Lipoproteins, Cholesterol, and Triglycerides (B 8)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

LIPID METABOLISM, LIPOPROTEINS, CHOLESTEROL, AND TRIGLYCERIDES

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
N01HV22913-11	Support for Lipid Research Clinic	Abboud, F. M.	University of Iowa Iowa City, IA	$ 68,636
N01HV22913-12	Support for Lipid Research Clinic	Abboud, F. M.	University of Iowa Iowa City, IA	$ 179,087
Z01HL02015-02	Isolation, Characterization, and Quantitation of Lipoproteins and Apolipoproteins from the Plasma and Lymph of Normal Individuals and Patients with Dyslipoproteinemia	Anderson, D.	NHLBI, NIH Bethesda, MD	$ 26,430
Z01HL00624-01	The Effect of Steroids on Cholesterol Synthesis and Esterification in Human Skin Fibroblasts in Tissue Culture	Avigan, J.	NHLBI, NIH Bethesda, MD	$ 11,229
R01HL23329-01	Lipoprotein Lipase in Heart Myocytes	Bagby, G. J.	L.S.U. Medical Center New Orleans, LA	$ 12,215
R01HL14378-08	Lipemias and Reconstructive Cardiac Surgery	Barboriak, J. J.	Med. Coll. of Wisconsin Milwaukee, WI	$ 8,558
R01HL14378-08S1	Lipemias and Reconstructive Cardiac Surgery	Barboriak, J. J.	Med. Coll. of Wisconsin Milwaukee, WI	$ 1,106
Z01HL02012-04	Isolation, Characterization, and Regulation of Reductase Kinase and HMG CoA Reductase	Beg, Z. H.	NHLBI, NIH Bethesda, MD	$ 26,430
Z01HL02813-07	Tissue Culture Studies of Aortic Smooth Muscle Cells and Skin Fibroblasts: Cell Growth and Metabolism in Response to Incubation with Various Lipoprotein Classes	Bersot, T. P.	NHLBI, NIH Bethesda, MD	$ 15,651
Z01HL02818-03	The Role of Hyperlipoproteinemia of a High Density Lipoprotein Induced by Cholesterol Feeding	Bersot, T. P.	NHLBI, NIH Bethesda, MD	$ 15,651

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Z01HL02819-03	Plasma Exchange in Homozygous Familial Hypercholesterolemics	Bersot, T. P.	NHLBI, NIH Bethesda, MD	$ 26,805
N01HV22932-11	Support for Lipid Research Clinic	Bradford, R. H.	Oklahoma Med. Res. Fdn. Oklahoma City, OK	$ 80,436
Z01HL02010-08	Structure and Function of Plasma Lipoproteins	Brewer, H. B., Jr.	NHLBI, NIH Bethesda, MD	$ 33,048
Z01HL02014-03	Human Plasma Lipoproteins and Apolipoproteins: Isolation and Quantitation by Immunochemistry	Brewer, H. B., Jr.	NHLBI, NIH Bethesda, MD	$ 46,266
R01HL18687-04	Pathophysiology of Genetic Hypertriglyceridemias	Brunzell, J. D.	Univ. of Washington Seattle, WA	$ 64,312
Y01HV40005-06	Food Composition Tables for LRC	Clark, T. J.	Dept. of Agriculture Washington, DC	$ 5,950
Y01HV60041-04	Data in Nutrient Content of Foods in American Diet	Clark, T. J.	Dept. of Agriculture Washington, DC	$ 18,000
R01HL23895-01	The Regulation of Lipoprotein Synthesis and Secretion	Davis, R. A.	L.S.U. Medical Center New Orleans, LA	$ 59,872
P60HL17269-05	Demonstration Center for Heart and Vessel Disease	DeBakey, M. E.	Baylor Coll. of Medicine Houston, TX	$ 132,350
R01HL12085-11	Lipoprotein-Carbohydrate Metabolism	Eaton, R. P.	Univ. of New Mexico Albuquerque, NM	$ 38,539
R01HL02965-23	Metabolism of Plasma Lipoproteins	Eder, H. A.	Yeshiva University New York, NY	$ 82,748
R01HL19063-04	Cholesterol and Lipoprotein Metabolism	Edwards, P. A.	UCLA Los Angeles, CA	$ 38,355
N01HV12161-17	Support for Lipid Research Clinic	Farquhar, J. W.	Stanford Junior University Leland, CA	$ 111,345
R01HL22474-02	Cholesterol Metabolism and Atherosclerosis	Fogelman, A. M.	UCLA Los Angeles, CA	$ 28,338

LIPID METABOLISM, LIPOPROTEINS, CHOLESTEROL, AND TRIGLYCERIDES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01HL18923-03	Steroid-Induced Hyperlipidemia and Hypertension	Galla, J. H.	University of Kentucky Lexington, KY	$ 15,085
N01HV22914-10	Support for Lipid Research Clinic	Glueck, C. J.	University of Cincinnati Cincinnati, OH	$ 102,060
P50HL21006-03	Specialized Center of Research in Arteriosclerosis	Goodman, D. S.	Columbia University New York, NY	$ 47,415
Z01HL02019-01	Metabolism of Human Plasma Apolipoproteins	Gregg, R. E.	NHLBI, NIH Bethesda, MD	$ 33,048
R01HL19752-04	Phospholipid Synthesis by Fetal Lung in Culture	Gross, I.	Yale University New Haven, CT	$ 10,535
N01HV12156-11	Support for Lipid Research Clinic	Insull, W., Jr.	Baylor Coll. of Medicine Houston, TX	$ 90,859
N01HV12158-15	Support for Lipid Research Clinic	Kwiterovich, P. O.	Johns Hopkins University Baltimore, MD	$ 92,246
N01HV32931-11	Support for Lipid Research Clinic Center	LaRosa, J. C.	G.W.U. Sch. of Medicine Washington, DC	$ 75,096
P01HL18574-04	Lipoprotein Methodology and Biomedical Applications	Lindgren, F. T.	University of California Berkeley, CA	$ 13,356
R01HL13405-10	Regulation of Lipid Metabolism in the Lung	Longmore, W. J.	St. Louis University St. Louis, MO	$ 15,454
Z01HL02810-08	Hyperlipoproteinemia and Atherosclerosis Changes in Plasma Lipoproteins and Apolipoproteins Induced by Cholesterol Feeding	Mahley, R. W.	NHLBI, NIH Bethesda, MD	$ 20,867
Z01HL02811-08	Aortic Metabolism of Plasma Lipoproteins	Mahley, R. W.	NHLBI, NIH Bethesda, MD	$ 15,650
Z01HL02817-03	Protein Modification and Apoprotein Characterization of Plasma Lipoproteins	Mahley, R. W.	NHLBI, NIH Bethesda, MD	$ 10,434
P01HL22633-02	Cellular and Molecular Biology of Lipoprotein Metabolism	Marsh, J. B.	Medical Coll. of Penn. Philadelphia, PA	$ 13,483

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV12160-16	Support for Lipid Research Clinic	Mattson, F. H.	UCLA Los Angeles, CA	$ 58,122
Z01HL00623-01	Mevalonate Kinin and Phosphomevalonate Kinase in Human Fibroblasts and Rat Liver	Mitchell, E. D.	NHLBI, NIH Bethesda, MD	$ 22,440
R01HL18094-05	Regulation of Cholesterol Biosynthesis	Ness, G. C.	Univ. of South Florida Tampa, FL	$ 15,218
Z01HL02011-03	Molecular Properties of Lipoproteins and Apolipoproteins	Osborne, J. C.	NHLBI, NIH Bethesda, MD	$ 52,877
R01HL20483-03S1	Sterol Balance and Cholesterol Absorption in Diabetes	Palumbo, P.	Mayo Foundation Rochester, MN	$ 5,118
R01HL08506-16	Lipemia--Carbohydrate and Glyceride Metabolism	Reaven, G. M.	Stanford University Stanford, CA	$ 112,911
R01HL20397-04	VLDL-TG Metabolism in Diabetes Mellitus	Reaven, G. M.	Stanford University Stanford, CA	$ 169,114
Z01HL02820-02	Effect of Exercise on Atherogenesis in Minature Swine Fed a High-Cholesterol Diet	Reitman, J. S.	NHLBI, NIH Bethesda, MD	$ 20,867
R01HL22121-03	Dyslipoproteinemia in Diabetes and Vascular Disease	Sabesin, S. M.	Univ. Tenn. Hlth. Sci. Ctr. Memphis, TN	$ 79,905
R01HL20488-04	The Regulation of Cholesterol Synthesis in Diabetes	Saudek, C. D.	Cornell Univ. Med. Ctr. Ithaca, NY	$ 107,543
P01HL18577-04	Lipoproteins--Cell Surface Interactions	Scanu, A. M.	University of Chicago Chicago, IL	$ 14,535
Z01HL02003-08	The Biochemistry and Metabolism of Plasma Lipoproteins	Schaefer, E. J.	NHLBI, NIH Bethesda, MD	$ 39,657
R01HL15427-07	Synthesis and Secretion of Plasma Lipoproteins	Schonfeld, G.	Washington University St. Louis, MO	$ 12,528
Z01HL02018-01	Immunolocalization of Apolipoproteins in Human Tissue	Schwartz, D. E.	NHLBI, NIH Bethesda, MD	$ 26,438

LIPID METABOLISM, LIPOPROTEINS, CHOLESTEROL, AND TRIGLYCERIDES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Y01HV30010-08	Standardization Laboratory for LRC	Sencer, D. J.	Center for Disease Control Atlanta, GA	$ 24,750
N01HV12159-11	Support for Lipid Research Clinic	Sheffield, L. T.	Univ. of Alabama University, AL	$ 29,241
R01HL23747-01	Heterogeneity and Properties of Plasma Lipoproteins	Shore, V. G.	Univ. of California Berkeley, CA	$ 15,450
Z01HL02016-02	Role of Acid Cholesterol Esterase in Pathogenesis of Atherosclerosis	Stark, P.	NHLBI, NIH Bethesda, MD	$ 26,438
N01HV53015-14	Support for Lipid Research Clinic	Stein, Y.	Hadassah Med. Organization Israel	$ 45,329
R01HL22053-03	The Disordered Lipid Metabolism of Diabetes Mellitus	Steinberg, D.	Univ. of California San Diego, CA	$ 40,799
P50HL14197-08	Lipoprotein and Sterol Metabolism	Steinberg, D.	Univ. of California San Diego, CA	$ 73,509
R01HL23705-01	Studies on the Human Milk Lipoprotein Lipase	Wang, C. S.	Oklahoma Med. Res. Fdn. Oklahoma City, OK	$ 13,224
Y01HO40026-05	Lipid Research Clinics Program	Watson, W. C.	Ctr. for Disease Control Atlanta, GA	$ 4,050
R01HL22812-02	Regulation of Hepatic Production of HDL	Wilcox, H. G.	University of Missouri Columbia, MO	$ 31,668
N01HV12243-15	Registry and Coordinating Ctr. for Lipid Research Clinic	Williams, D.	Univ. N.C. Sch. Pub. Hlth. NC	$ 220,194
N01HV12243-16	Registry and Coordinating Ctr. for Lipid Research Clinic	Williams, D.	Univ. N.C. Sch. Pub. Hlth. NC	$ 674,091
P50HL15062-08	Study of Lipoproteins, Artery Wall, and Atherosclerosis	Wissler, R. W.	University of Chicago Chicago, IL	$ 135,686
P50HL15062-0891	Study of Lipoproteins, Artery Wall, and Atherosclerosis	Wissler, R. W.	University of Chicago Chicago, IL	$ 2,893
N01HV32961-09	Blood Analysis for Lipid Research Clinic	Wybenga, D. R.	Bio-Science Laboratories CA	$ 7,416

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV32961-10	Blood Analysis for Lipid Research Clinic	Wybenga, D. R.	Bio-Science Laboratories CA	$ 24,806
Z01HL02017-02	Theoretical Analysis of the Metabolism of Lipoproteins and Their Apolipoprotein and Triglyceride Moieties	Zech, L. A.	NHLBI, NIH Bethesda, MD	$ 19,828
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM19914-03	Perfused Fat Cell System	Allen, D. O.	S. Carolina Univ. Med. Sch. Columbia, SC	$ 44,512
R01AM21072-0291	Triglyceride Synthesis and Transport in Diabetes	Baker, N.	VA Hospital (Wadsworth) Los Angeles, CA	$ 14,846
R01AM21072-03	Triglyceride Synthesis and Transport in Diabetes	Baker, N.	California Univ. Med. Sch. Los Angeles, CA	$ 94,420
R01AM13988-09	Control of Fatty Acid Metabolism in the Intact Animal	Bates, M. W.	Pittsburgh Univ. Grad. Sch. Pittsburgh, PA	$ 39,815
R01AM11265-11	Human Adipose Tissue: Regulation of Fat Mobilization	Burns, T. W.	Missouri Univ. Med. Sch. Columbia, MO	$ 61,413
R01AM20523-02	Fatty Acid Synthetase and a New Hemoprotein, H-450	Deal, W. C., Jr.	Michigan St. Univ. Agr. S. E. Lansing, MI	$ 41,754
R01AM10149-14	Hormonal Control of Lipid Metabolism	Fain, J. N.	Brown Univ. Med. Sch. Providence, RI	$ 111,546
R01AM21957-02	Regulation of Rat Liver Fatty Acid Synthetase	Flick, P. K.	Wright State Univ. Med. Sch. Dayton, OH	$ 43,029
R01AM18573-18	Regulation of Ketogenesis in Tissues	Foster, D. W.	Texas Univ. SW Med. Sch. Dallas, TX	$ 180,559
R01AM21009-03	Role of Carnitine and Related Metabolites in Ketosis	Genuth, S. M.	Mt. Sinai Hosp. of Cleveland Cleveland, OH	$ 75,627
R01AM21278-02	Interconvertibility of Liver HMG COA Reductase *In Vitro*	Gibson, D. M.	Indiana Univ. Foundation Indianapolis, IN	$ 37,332

LIPID METABOLISM, LIPOPROTEINS, CHOLESTEROL, AND TRIGLYCERIDES (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM19299-04	Insulin Induction of Lipogenic Enzymes in Hepatocytes	Gibson, D. M.	Indiana Univ. Foundation Indianapolis, IN	$ 72,684
R01AM21594-03	Regulation of the Synthesis of Lipogenic Enzymes	Goodridge, A. G.	Case West. Res. Univ. M. S. Cleveland, OH	$ 145,458
R01AM21997-02	The Adipose Conversion of 313 Cells	Green, H.	MIT Cambridge, MA	$ 106,740
R01AM26796-03	Medium Chain Fats: Physiology and Clinical Implications	Hashim, S. A.	St. Luke's Inst. Hlth. Sci. New York, NY	$ 100,474
Z01AM54023-02 DD	Very Low Density Lipoprotein Metabolism in Pima Indians	Howard, B. V.	NIAMDD, NIH Bethesda, MD	$ 27,000
Z01AM54016-04 DD	High Density Lipoprotein Cholesterol in Indians and Caucasians	Howard, B. V.	NIAMDD, NIH Bethesda, MD	$ 81,000
R01AM26181-01	Regulation of Adipose Lipid Metabolism	Jamdar, S. C.	Medical Research Institute Melbourne, FL	$ 55,708
R01AM11892-12	Hormonal Regulation of Fat Cell Metabolism	Jarett, L.	Washington Univ. Med. Sch. St. Louis, MO	$ 160,518
R01AM21170-03	Adenosine Regulation of cAMP Metabolism and Lipolysis	Johnson, R. A.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 60,438
R01AM24087-02	Metabolism of "Remnant VLDL" in Diabetes	Kissebah, A. H.	Med. Col. of Wisconsin Milwaukee, WI	$ 63,544
R01AM14574-10	Carboxylase Activation and Control of Lipid Synthesis	Lane, D. M.	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 81,898
R01AM21287-03	Regulation of Lipogenic Enzymes in Diabetes	Linn, T. C.	Texas Univ. at Dallas Dallas, TX	$ 33,706
R01AM13774-09	Glucose and Insulin Interactions with Cell Membrane	Martin, D. B.	Massachusetts Gen. Hosp. Boston, MA	$ 46,022
R01AM17476-06	Physiologic Regulation of Lipid Metabolism	Masoro, E. J.	Texas Univ. Med. Sch. San Antonio, TX	$ 66,444
R01AM21491-02	HMG-COA-Cycle Control in Normal and Diabetic Liver	Miziorko, H. M.	Med. Coll. of Wisconsin Milwaukee, WI	$ 43,635

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM20477-02	Regulation of Lipogenesis by Polyunsaturated Diet Fat	O'Brien, B. C.	Texas A&M Res. Foundation College Station, TX	$ 31,352
R01AM21148-03	Regulation of Lipogenesis by Insulin and Glucagon	Porter, J. W.	Wisconsin Univ. Med. Sch. Madison, WI	$ 57,407
R01AM21722-02	Biogenesis of Membrane Lipids in Animal Cells	Raetz, C. R.	Wisconsin University Madison, WI	$ 49,700
R01AM18179-05	Hyperlipemia and Diabetes: Glucose Lipid Interactions	Raskin, P.	Texas Univ. Med. Sch. Dallas, TX	$ 54,745
Z01AM15403-01 LNE	Diabetes, Insulin, and Blood Vessels	Scow, R. O.	NIAMDD, NIH Bethesda, MD	$ 54,000
R01AM20407-03	Synthetic Control: Fatty Acid Synthetase and Albumin	Strauss, A. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 70,456
R01AM21286-03	Role of Insulin in Fatty Acid Metabolism	Wakil, S. J.	Baylor Coll. of Medicine Houston, TX	$ 60,292
R01AM21251-02	Carnitine and Adipose Tissue Metabolism	Wieser, P. B.	Miami Univ. Med. Sch. Coral Gables, FL	$ 68,759
R01AM19270-03	Regulation of Hepatic Metabolism by Insulin	Witters, L. A.	Massachusetts Gen. Hosp. Boston, MA	$ 42,243
National Institute of Child Health and Human Development				
R010856805	Ketones for Brain Lipids in Developing Rats	Yeh, Y. Y.	St. Jude Chldrns. Res. Hosp. Memphis, TN	$ 51,672
National Institute of General Medical Sciences				
GM15768	Sequence of Organ Failure Following Trauma	Border, J.	State Univ. of New York Buffalo, NY	$ 94,380
GM14546	Influence of Acute Illness and Injury on Energy Exchange	Kinney, J.	Columbia University New York, NY	$ 71,454

LIPID METABOLISM, LIPOPROTEINS, CHOLESTEROL, AND TRIGLYCERIDES (Cont'd)

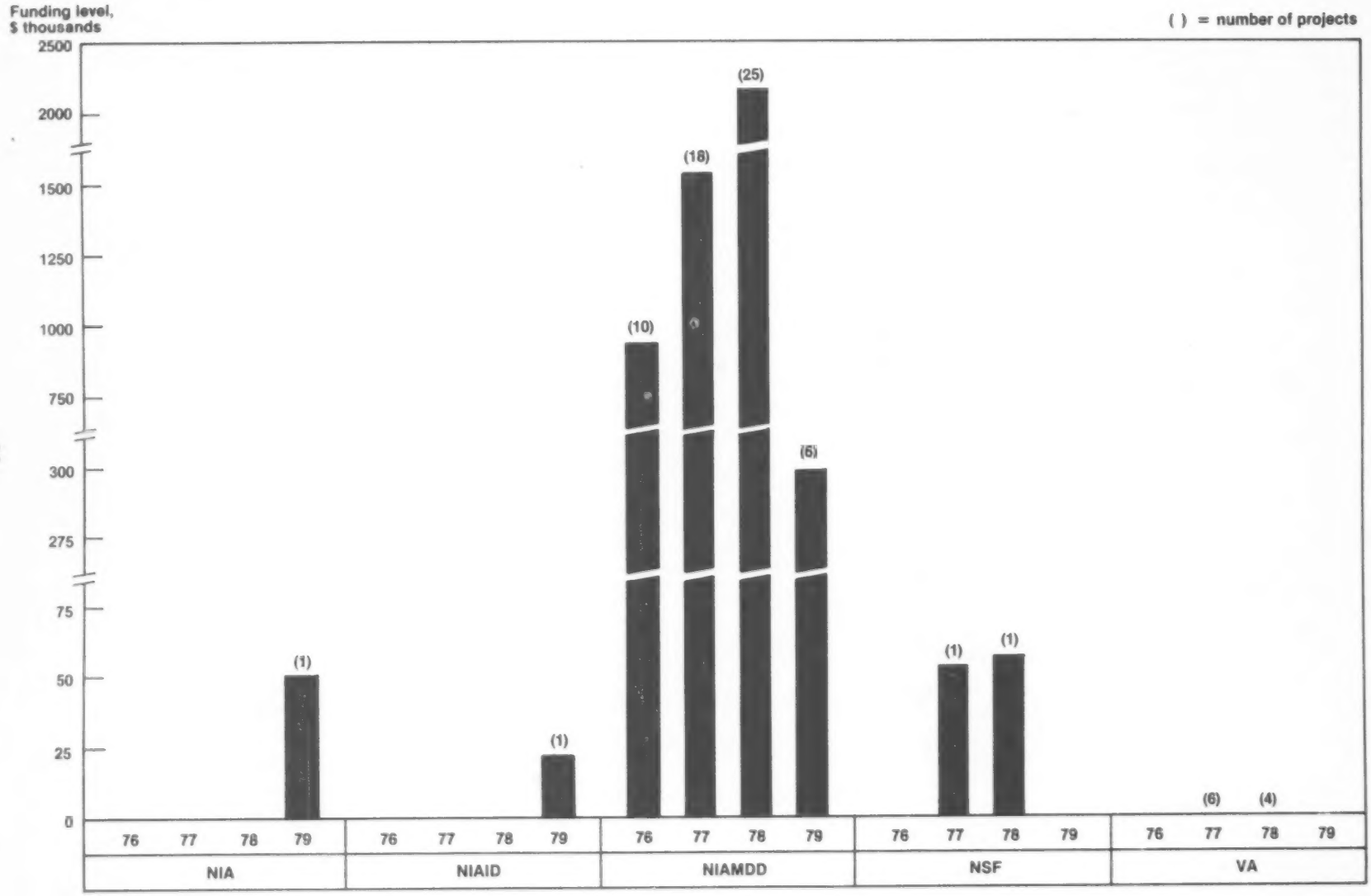
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Neurological and Communicative Disorders and Stroke				
R01NS13143-03	Myelination--Assembly of Lipids and Proteins (Rats, Cattle)	Benjamins, J. A.	Wayne St. University Detroit, MI	$ 13,300
National Institute on Aging				
R01AG00076-03	Lipid Metabolism in Aging	Kritchevsky, D.	Wistar Inst. Anat. and Biol. Philadelphia, PA	$ 59,000
R01AG00120-05	Lipogenesis as a Function of Aging	Lowenstein, J. M.	Brandeis University Waltham, MA	$ 99,238
Veterans' Administration				
64242773-4	Synthesis and Secretion of Lipoproteins by Cultured Hepatocytes Prepared from Normal and Cholesterol-Fed Rabbits	Capuzzi, D.	VAMC Philadelphia, PA	*
59839044-1	Mechanism and Consequences of Altered Fatty Acid Desaturation	Faas, F.	VAMC Little Rock, AR	*
59842762-2	Fatty Acid Desaturation and Cytochrome P-450 Oxidation Reaction in Diabetes Mellitus	Faas, F.	VAMC Little Rock, AR	*
59842763-3	Hormonal Effects on Fatty Acid Desaturation	Faas, F.	VAMC Little Rock, AR	*
66433723-1	Mechanisms and Treatment of Acquired Hyperlipidemias	Grundy, S.	VAMC San Diego, CA	*
54941507-1	Regulation of Lipogenic Enzymes in Diabetes	Linn, T.	VAMC Dallas, TX	*
67033735-1	Fat Absorption and Metabolism in the Human	Linscheer, W.	VAMC Syracuse, NY	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
6075583-1	Studies on the Biosynthesis of Fatty Acids	Porter, J.	VAMC Madison, WI	*
6075584-2	Studies on the Biosynthesis of Cholesterol	Porter, J.	VAMC Madison, WI	*
53541194-9	Effect of Diuretics on Serum Lipids	Quintanilla, A.	VAMC Lakeside Chicago, IL	*
54943188-7	Metabolic Studies in Diabetes and Hyperlipidemia	Raskin, P.	VAMC Dallas, TX	*
64241119-1	Intracellular Events of Fat Absorption in Malabsorbing States	Shiau, Y.	VAMC Philadelphia, PA	*
63636958-1	Triglyceride Biosynthesis in Heart and Liver of Normal and Diabetic Rats	Shipp, J.	VAMC Omaha, NB	*
61431991-1	Effects of Diabetes and Insulin on Adipose Tissue Phospho-diesterase	Solomon, S.	VAMC Memphis, TN	*
61440333-4	Dynamic Aspects of Adipose Tissue Metabolism	Solomon, S.	VAMC Memphis, TN	*
63028673-1	Chemistry and Metabolism of Myelin in Diabetes	Spritz, N.	VAMC New York, NY	*
61440257-1	Autoregulation of Lipolysis in Isolated Fat Cell	Turpin, B.	VAMC Memphis, TN	*

* Funding information not available.

Pancreas and Islet Cell Studies (B 9)

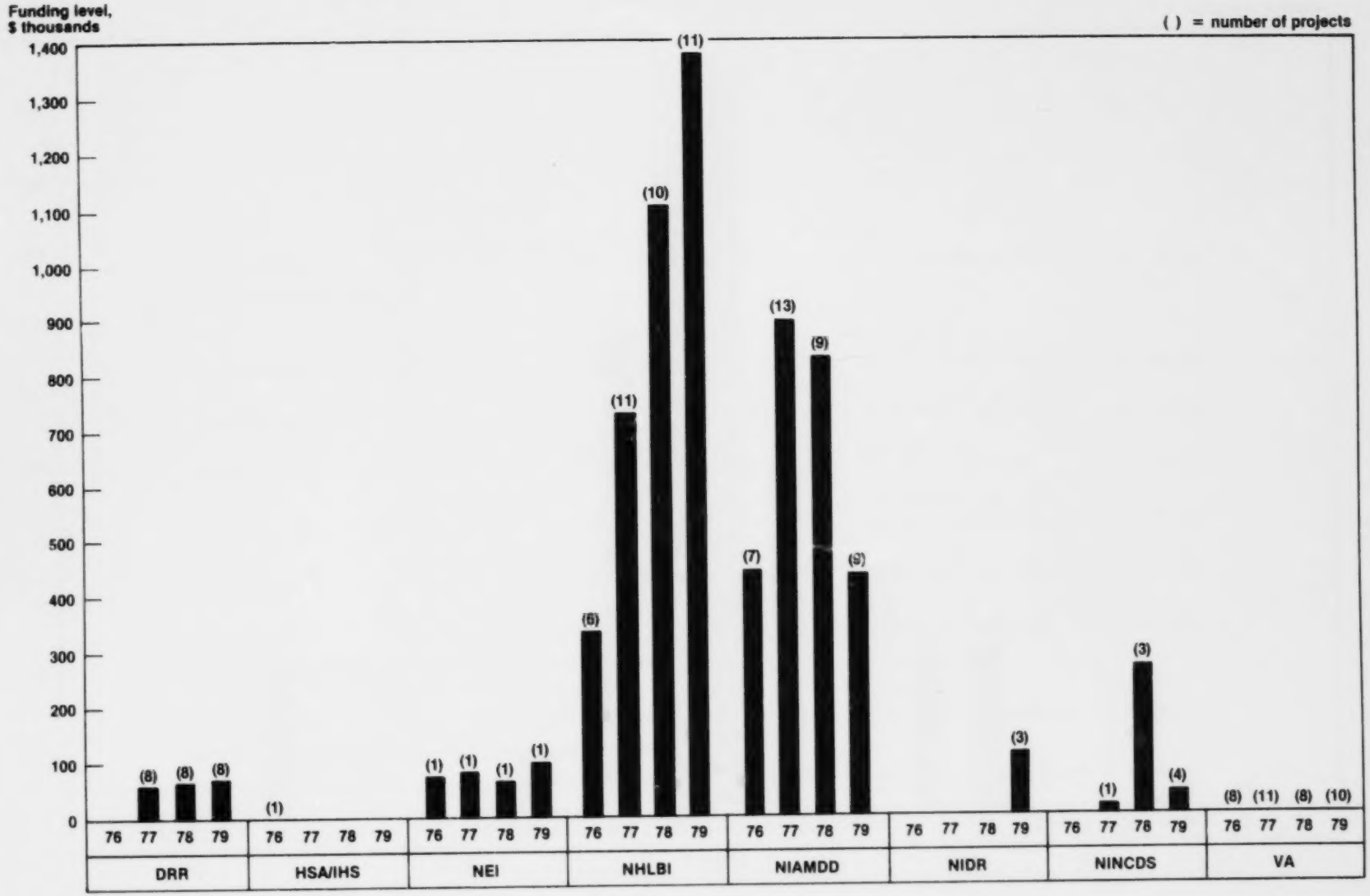


PANCREAS AND ISLET CELL STUDIES

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Allergy and Infectious Diseases				
R01AI11936-06	Allergic Drug Reactions (Human)	Adkinson, N., Jr.	Good Samaritan Hospital Baltimore, MD	$ 22,094
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM21672-03	The Role of Microtubules in Organelle Motility	Dentler, W. L., Jr.	Kansas Univ. Med. Sch. Lawrence, KS	$ 32,278
R01AM15312-08	Cell Culture Study of Diabetes and Vascular Disease	Fujimoto, W. Y.	Washington Univ. Med. Sch. Seattle, WA	$ 81,060
R01AM19868-03	Developmental Studies of Endocrine Pancreas	Kaung, H. L. C.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 35,783
R01AM25257-02	Differentiation/Growth of Pancreas In Vivo/In Vitro	McEvoy, R. C.	Mt. Sinai Med. Sch. New York, NY	$ 73,121
R01AM25832-01	Pancreatic Islet Cell Studies	Rabinovitch, A.	Miami Univ. Med. Sch. Coral Gables, FL	$ 48,196
R01AM21120-03	Polyploidization of Normal and Diabetic Islets	Swartz, F. J.	Louisville Univ. Med. Sch. Louisville, KY	$ 28,185
National Institute on Aging				
R01AG01237-01	Effect of Age on Beta Cell Structure and Function	Reaven, E. P.	U.S. Vet. Admin. Med. Ctr. CA	$ 50,227

best copy available

Microangiopathy (B 10)



PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Eye Institute				
R01EY01631-03	Regulation of Iris Blood Vessel Reactivity in Aging	Szalay, J.	Queen's College Flushing, NY	$ 99,347
National Heart, Lung, and Blood Institute				
R01HL20500-03	Diabetic Human Brain Microvascular Basement Membrane	Bren Del, K.	University of Arizona Tucson, AZ	$ 64,717
R01HL21843-02	Ischemia, Diabetes, and the Microcirculation	Degirolami, U.	Univ. of Mass. Med. Sch. Boston, MA	$ 89,092
R01HL25492-01	Metabolic Basis for Diabetic Microangiopathy	Goldstein, G. W.	Univ. of Michigan Ann Arbor, MI	$ 94,374
P01HL06285-19	Cardiovascular-Respiratory Physiology and Biochemistry	Havel, R. J.	Univ. of Mass. Med. Sch. Boston, MA	$ 616,874
R01HL04300-21	Fine Structure of Diseased Glomeruli	Jones, D. B.	Upstate Medical Center Rochester, NY	$ 4,771
R23HL21320-03	Cyclic Nucleotide Metabolism in Vascular Endothelium	Nemecek, G. M.	Univ. of California San Francisco, CA	$ 41,519
R01HL17080-06	Localization of Pore Systems in Capillary Walls	Palade, G. E.	Yale University New Haven, CT	$ 33,971
R01HL18932-04	Microvascular Effects of Trauma to Brain Microvessels	Rosenblum, W. I.	Virginia Common. Univ. Richmond, VA	$ 81,619
R01HL24266-01	Microcirculatory Changes from Altered Blood Rheology	Sacks, A. H.	Sta. Clara Valley Med. Ctr. Sunnyville, CA	$ 52,285
R01HL13694-09	Risk Factors and Microvascular Disease in Diabetes	Williamson, J. R.	Washington University St. Louis, MO	$ 123,014
R01HL22118-03	Microcirculation in Patients with Diabetes Mellitus	Zweifach, B. W.	Univ. of California San Diego, CA	$ 172,185

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM25469-01	Microangiopathy in Diabetic Human Ear	Carpenter, A. M.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 37,350
R01AM21207-01A2	Myocardial Microvasculature in Diabetes Mellitus	Fischer, V. W.	St. Louis Univ. Med. Sch. St. Louis, MO	$ 42,303
R01AM22104-02	Utilization of Ketones and Fatty Acids in Heart	Frerman, F. E.	Med. Col. of Wisconsin Milwaukee, WI	$ 44,420
R01AM21299-03	Growth of Vascular Smooth Muscle in Diabetes Mellitus	Hamet, P.	Canada Cln. Res. Inst. Montreal, Canada	$ 30,682
R01AM25641-02	The Basement Membrane in Diabetes	Martinez, H. A.	Hahnemann Med. College Philadelphia, PA	$ 35,436
N01AM72213	Conducting Morphological Studies of Diabetes	Orci, L.	Univ. of Geneva Geneva, Switzerland	$ 53,400
R01AM20826-03	Development of Microangiopathy in Juvenile Diabetes	Patz, A.	Johns Hopkins Univ. MS Baltimore, MD	$ 159,684
R01AM17093-06	Vascular Disease in Experimental Diabetes	Pinter, G. G.	Maryland Univ. Med. Sch. Baltimore, MD	$ 106,093
R01AM20829-02	Erythrocyte Function in Diabetes Mellitus	Rand, P. W.	Maine Medical Center Portland, ME	$ 73,633
National Institute of Dental Research				
Z01DE00009-17	The Chemistry and Biosynthesis of Connective Tissue	Martin, G. R.	NIDR, NIH Bethesda, MD	$ 50,000*
P50DE0267012019	Chemistry/Molecular Biology of Connective Tissue Protein Collagen	Miller, E. J.	Univ. of Alabama AL	$ 50,000*
P50DE0262312026	Control of Collagen and Elastin Biosynthesis and Secretion	Rosenbloom, J.	Univ. of Pennsylvania Philadelphia, PA	$ 10,000*

* Denotes part of a larger project.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Neurological and Communicative Disorders and Stroke				
Z01NS02324-02	The 3H-Norepinephrine Uptake and Fate in the Isolated Cerebral Capillaries	Abe, T.	NINCDS, NIH Bethesda, MD	$ 41,040
P50NS03346-19	Neonatal Anoxiaischemia (Dogs)	Duffy, T. E.	Cornell University Ithaca, NY	*
P50NS09287-09	Study of Metabolic Processes in Isolated Brain Microvessels (Human, Primates)	Nell, J.	Baylor Coll. of Medicine Houston, TX	*
P50NS03346-19	Hematologic Studies in Stroke	Weksler, B.	Cornell University Ithaca, NY	*
Veterans' Administration				
67442128-2	Histochemical Study of Metabolism in Skeletal Muscle Microvessels	Barnes, R.	VAMC Temple, TX	**
60718874-1	Diabetic Microangiopathy	Bloodworth, J.	VAMC Madison, WI	**
67842506-2	Microvascular Response in Diabetes Mellitus	Katz, M.	VAMC Tucson, AZ	**
66343688-1	Diabetes Capillary Disease and *In Vitro* Fibroblast Abnormalities	Pecoraro, R.	VAMC Seattle, WA	**
54939603-6	Capillary Basement Membranes in Diabetes Mellitus and Hyperlipidemia	Raskin, P.	VAMC Dallas, TX	**
66326346-2	Evolution of Capillary Basal Lamina Thickening	Vracko, R.	VAMC Seattle, WA	**
60731178-1	Biochemistry of Pantothenic Acid and Basement Membrane	Wilker, D.	VAMC Madison, WI	**

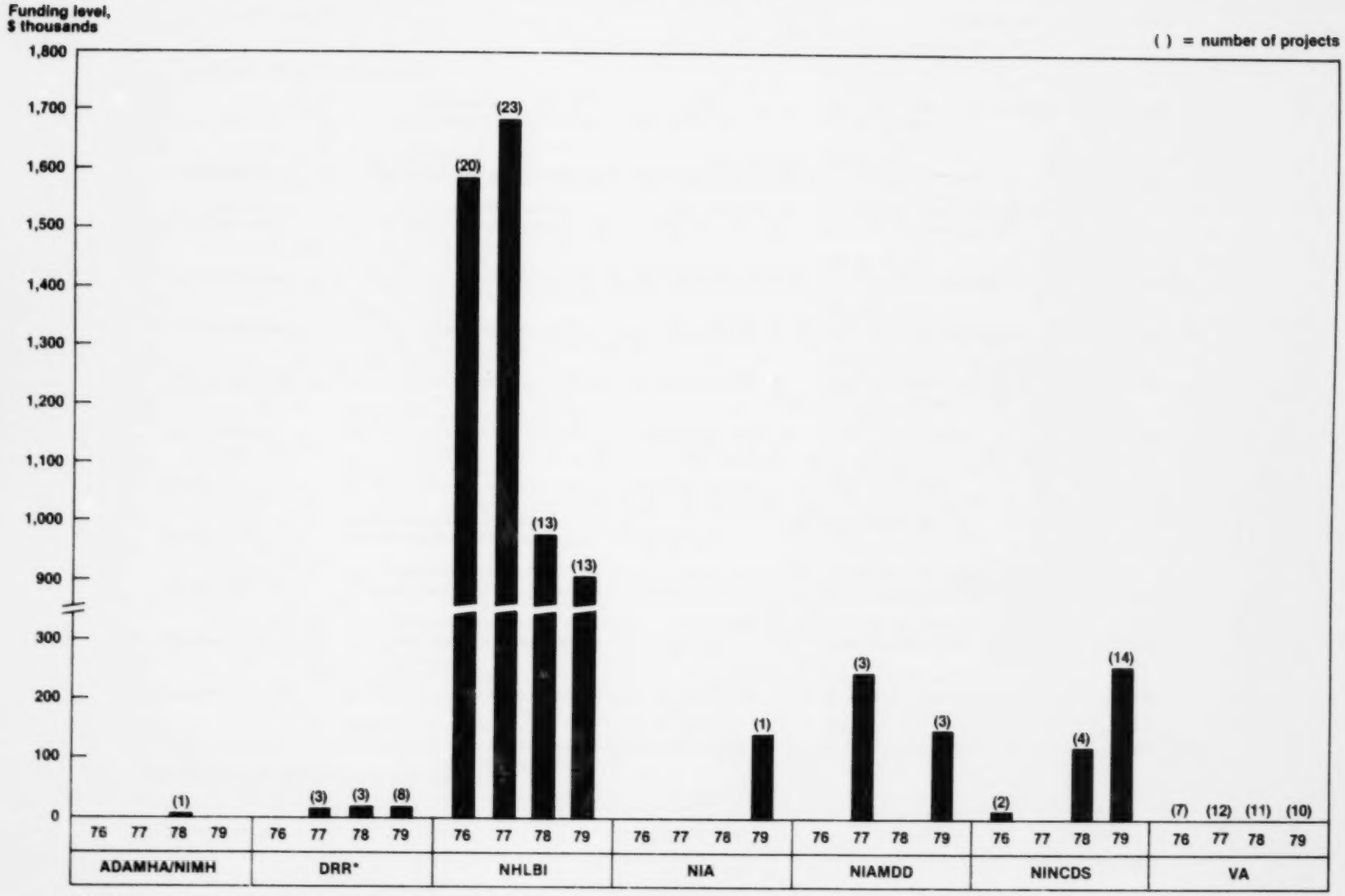
* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.
** Funding information not available.

MICROANGIOPATHY (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
50833024-1	Effects of High Lipid Sucrose Diet on Capillaries of Diabetic Animals	Yodaiken, R.	VAMC Decatur, GA	*
50833026-2	Factors Affecting the Progression of Diabetic Microangiopathy	Yodaiken, R.	VAMC Decatur, GA	*
50836168-3	Diabetic Capillaropathy - A Prognostic Technique	Yodaiken, R.	VAMC Decatur, GA	*

* Funding information not available.

Macroangiopathy (B 11)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

MACROANGIOPATHY

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
PO1HL03174-24	Mechanisms of Acute Vascular Reaction to Injury	Benditt, E. P.	Univ. of Washington Seattle, WA	$ 94,895
R01HL02942-23	Biochemistry of Cardiovascular Connective Tissue	Berelson, G. S.	LSU Medical Center New Orleans, LA	$ 31,910
P50HL18318-04	Pathogenesis and Complications of Hypertension	Chobanian, A. V.	Boston University Boston, MA	$ 138,064
R01HL12869-10	Arterial Metabolism, Diabetes and Atherogenesis	Chobanian, A. V.	Boston University Boston, MA	$ 52,186
R01HL18977-04	Noninvasive Diagnosis of Peripheral Arterial Disease	Fronek, A.	Univ. of California San Diego, CA	$ 77,306
R01HL20471-0391	Atherosclerosis and Diabetes Mellitus	Gilbert, D. B.	Duke University Durham, NC	$ 5,989
R01HL13632-09	Vascular Changes in Diabetes Mellitus	Goldstein, D. E.	Univ. of Missouri Columbia, MO	$ 81,308
R01HL20460-0391	Aortic Histamine Synthesis in Diabetes	Hollis, T. M.	Penn. State University University Park, PA	$ 2,399
R01HL20522-04	Peripheral Arterial Disease in the Diabetic	Palumbo, P. J.	Mayo Foundation Rochester, MN	$ 153,981
R01HL20381-04	Long-Term Study of Diabetic Vascular Disease	Strandness, D. E.	Univ. of Washington Seattle, WA	$ 148,212
R01HL22113-03	Micro/Macrovasculature in Healing of Foot Lesions	Wagner, F. W., Jr.	Rancho Los Amigos Hosp. Downy, CA	$ 31,087
R01HL22115-03	Lipid-Mobilization and Diabetic Atherosclerosis	Wells, I. C.	Creighton University Omaha, NE	$ 46,231
R01HL12766-10	Structure-Function Relations of Blood Vessels	Wolinsky, H.	Yeshiva University New York, NY	$ 46,648

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute on Aging				
P01AG00299-09	Aging Metabolism and Atherosclerosis	Bierman, E. L.	Univ. of Washington Seattle, WA	$ 140,000
National Institute of Neurological and Communicative Disorders and Stroke				
P50NS06655-14	Cerebral Artery Atherosclerosis--Development of a Primate Model	Bullock, B. C.	Bowman Gray Sch. of Med. Winston-Salem, NC	*
R01NS15883-01	Brain Blood Flow and Metabolism in Hypoxiaischemia (Cats)	Ginsberg, M. D.	University of Miami Miami, FL	$ 50,800
R01NS14783-01	Regional Cerebral Metabolism and Blood Flow in Sleep (Cats)	Greenberg, J. H.	Univ. of Pennsylvania Philadelphia, PA	$ 57,700
P50NS10939-07	Regional Cerebral Blood Flow and Glucose Metabolism in Graded Hypotensions (Rats)	Greenberg, J.	Univ. Hosp. of Pennsylvania Philadelphia, PA	*
P50NS08802-10	Cerebral Blood Flow and Metabolism (Mammals)	Halsey, J. H., Jr.	University of Alabama Birmingham, AL	*
Z01NS02322-02	Permeability of the Blood-Brain Barrier to Norepinephrine in Experimental Cerebral Ischemia	Hervonen, H.	NINCDS, NIH Bethesda, MD	$ 89,775
R01NS14973-01	Local Cerebral Blood Flow and Metabolism in Seizures (Rats)	Jones, S. C.	Univ. of Pennsylvania Philadelphia, PA	$ 9,800
P50NS10939-07	Cerebral Blood Flow and Metabolism in Hypoxia (Cats, (Monkeys)	Kovach, A. G. B.	Univ. Hosp. of Pennsylvania Philadelphia, PA	*
P50NS06229-12	Studies Utilizing the 3-Area Stroke Project Data	Lilienfeld, A. M.	Johns Hopkins University Baltimore, MD	*
P50NS10939-07	Cerebral Blood Flow and Metabolism in Stroke and Shock	Reivich, M.	Univ. Hosp. of Penn. Philadelphia, PA	$ 28,400
P50NS10939-07	Studies of Diffuse Cerebral Ischemia (Cats)	Reivich, M.	Univ. Hosp. of Penn. Philadelphia, PA	*

* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.

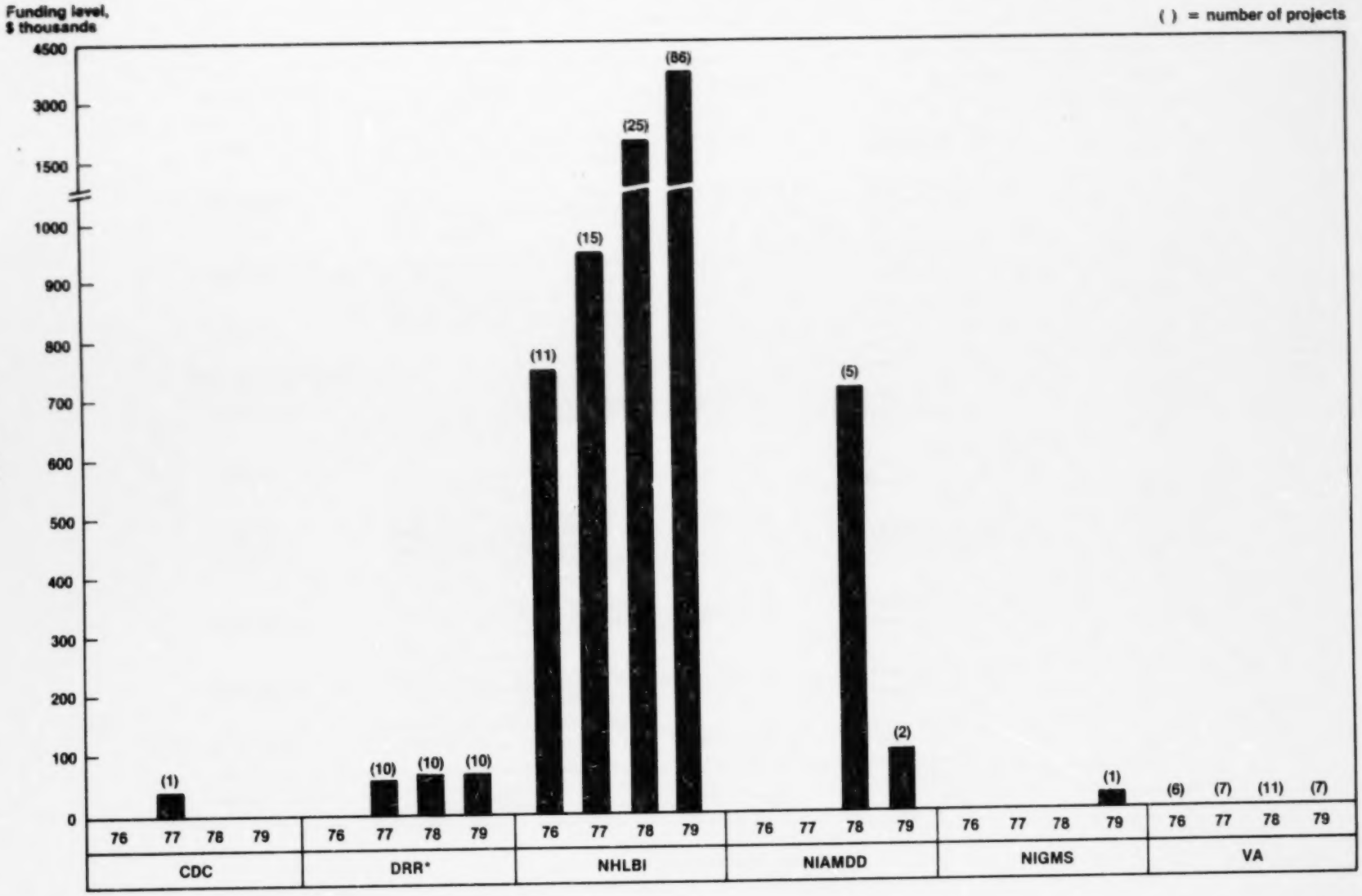
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
P50NS08802-10	Mathematical Models of Transport and Metabolism in Brain	Reneau, D.	Univ. of Alabama Birmingham, AL	*
P50NS06826-11	Double Blind Platelet Inhibition Study with Sulfinpyrazone (Human)	Robertson, J. T.	Univ. of Tennessee Memphis, TN	*
Z01NS02323-02	Effect of Hypothermia on the Survival Rate of Mongolian Gerbils Subjected to Bilateral Carotid Artery Occlusion	Smialek	NINCDS, NIH Bethesda, MD	$ 20,520
Veterans' Administration				
68029021-1	Reversal of the Atheromatous Plaques of the Greater and Lesser Vessels	Brooks, I.	VAMC Tuskegee, AL	**
6269973-2	Lower Extremity Amputees for Peripheral Vascular Disease	Bugel, H.	VAMC Nashville, TN	**
53440204-2	Anti-Platelet Aggregating Agents in Diabetic Lower Extremity Vascular Disease (VA Cooperative Study)	Colwell, J.	VAMC Charleston, SC	**
53440900-3	Studies on Abnormal Platelet Aggregation in Diabetes Mellitus	Colwell, J.	VAMC Charleston, SC	**
50941967-3	Antiplatelet Aggregation Agents in Diabetic Lower Extremity Vascular Disease (VA Cooperative Study)	Lutcher, C.	VAMC Augusta, GA	**
69143104-4	Comparison of Saphenous Vein and E-PTFE Grafts in Femoral Popliteal Bypass Procedure	Owens, M.	VAMC Wadsworth Los Angeles, CA	**

* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.
** Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
65041932-4	Cardiovascular Compliance for Diagnosis of Atherosclerosis	VanDeWater, J.	VAMC Providence, RI	*
68841496-2	Arterial Pressure Contour Analysis for Evaluation of Vascular Properties	Watt, T.	VAMC Washington, DC	*
63542083-1	Vascular Lesions of Diabetes in Oklahoma Indians and Other Populations	West, K.	VAMC Oklahoma City, OK	*
53539482-1	Anti-Platelet Aggregating Agents in Diabetic Lower Extremity Vascular Disease	Yao, J.	VAMC Lakeside Chicago, IL	*

* Funding information not available.

Heart and Circulation (B 12)



*DRR data reported for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
N01HV32974-10	Coronary Artery Surgery Collaborative Studies	Alderman, E. L.	Stanford University Stanford, CA	$ 21,979
N01HV72969-04	Clinical Center for Propranolol Heart Trial	Barker, A. H.	Salt Lake City Res. Fdn. Salt Lake City, UT	$ 43,474
R01HL19673-04	Surgical Aspects of Shock and Hypoxia	Baue, A. E.	Yale University New Haven, CT	$ 7,137
P01HL20581-01A1S1	Vascular Neuroeffector Mechanisms in Health and Disease	Bevan, J. A.	UCLA Los Angeles, CA	$ 86
P01HL20581-02	Vascular Neuroeffector Mechanisms in Health and Disease	Bevan, J. A.	UCLA Los Angeles, CA	$ 6,939
N01HV72954-07	Clinical Center for Propranolol Heart Trial	Borhani, N. O.	UCLA Los Angeles, CA	$ 18,570
N01HV72957-05	Clinical Center for Propranolol Heart Trial	Breneman, G. M.	Henry Ford Hospital Detroit, MI	$ 36,757
N01HV32982-08	Collaborative Studies on Coronary Artery Surgery	Brooks, H.	Medical Coll. of Wisconsin WI	$ 4,172
N01HV32983-12	Collaborative Study of Surgery on Coronary Arteries	Bourassa, M. G.	Montreal Heart Institute Montreal, Canada	$ 12,074
N01HV82907-03	Clinical Center for Propranolol Heart Trial	Canosa, F. L.	Miami Heart Institute Miami, FL	$ 28,741
N01HV82908-03	Clinical Center for Propranolol Heart Trial	Capone, R. J.	Rhode Island Hospital Providence, RI	$ 34,620
N01HV82908-05	Clinical Center for Propranolol Heart Trial	Capone, R. J.	Rhode Island Hospital Providence, RI	$ 6,253
N01HV62925-05	Collaborative Studies in Coronary Artery Surgery	Cohen, L. S.	Yale University New Haven, CT	$ 10,923
N01HV72949-04	ECG Center for Propranolol Heart Trial	Crow, R. S.	Univ. of Minnesota Minneapolis, MN	$ 30,053

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV92900-00	One-Hour Ambulatory ECG Analysis Center for BHAT	Crow, R. S.	Univ. of Minnesota St. Paul, MN	$ 36,500
R01HL20401-04	Relationship of Insulin to Catechol Cardiomyopathy	Downing, S. E.	Yale University New Haven, CT	$ 102,304
N01HV32973-13	Collaborative Studies on Coronary Artery Surgery	Fisher, L. D.	Univ. of Washington Seattle, WA	$ 11,063
N01HV32984-11	Collaborative Studies on Coronary Artery Surgery	Frye, R. L.	Mayo Foundation Rochester, MN	$ 13,124
N01HV82909-03	Clinical Center for Propranolol Heart Trial	Gazes, P. C.	Med. Univ. of S. Carolina Columbia, SC	$ 27,320
N01HV32976-10	Collaborative Studies on Coronary Artery Surgery	Glassman, E.	New York Univ. Sch. of Med. New York, NY	$ 9,487
N01HV32979-11	Collaborative Studies on Coronary Artery Surgery	Goselin, A. G.	Miami Heart Institute Miami, FL	$ 9,042
N01HV32981-12	Collaborative Studies on Coronary Artery Surgery	Goselin, A. G.	Marshfield Med. Foundation WI	$ 12,349
N01HV72964-05	Clinical Center for Propranolol Heart Trial	Gregory, J. H.	Overlook Hospital Overlook, NJ	$ 27,404
N01HV82905-04	Clinical Center for Propranolol Heart Trial	Grover, J.	Kaiser Fdn. Res. Inst. CA	$ 29,230
P01HL11678-12	Cardiovascular Dynamics and Their Control	Guyton, A. C.	Univ. of Miss. Med. Ctr. University, MS	$ 49,982
P50HL17665-05	Study of Ischemic Heart Disease	Haber, E.	Massachusetts Gen. Hosp. Boston, MA	$ 61,560
N01HV72963-03	Clinical Center for Propranolol Heart Trial	Haring, O. M.	Northwestern University Evanston, IL	$ 30,205
N01HV32985-13	Collaborative Studies of Coronary Artery Surgery	Harthrone, J. W.	Massachusetts General Hosp. Boston, MA	$ 18,160
N01HV72948-04	Coordinating Center for Propranolol Heart Trial	Hawkins, M. C.	U. Texas Hlth. Sci. Ctr. Dallas, TX	$ 177,760

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV72948-05	Coordinating Center for Propranolol Heart Trial	Hawkins, M. C.	U. Texas Hlth. Sci. Ctr. Dallas, TX	$ 344,666
N01HV72970-06	Clinical Center for Propranolol Heart Trial	Haywood, L. J.	U. of Southern California Los Angeles, CA	$ 18,509
N01HV72958-03	Clinical Center for Propranolol Heart Trial	Holmes, W. L.	Lankenau Hospital Philadelphia, PA	$ 26,911
N01HV72950-04	Clinical Center for Propranolol Heart Trial	Ibbott, F. A.	Bio-Science Laboratories CA	$ 35,779
R01HL22064-03	Glycogen Metabolism in Anoxic Diabetic Myocardium	Ingebretsen, W. R.	Univ. of South Carolina Columbia, SC	$ 51,382
P01HL11310-13	Mechanisms of Cardiovascular Disease	James, T. N.	Univ. of Alabama Birmingham, AL	$ 79,150
P01HL11310-13S1	Mechanisms of Cardiovascular Disease	James, T. N.	Univ. of Alabama Birmingham, AL	$ 1,524
N01HV32975-09	Collaborative Studies on Coronary Artery Surgery	Judkins, M. P.	Loma Linda University Loma Linda, CA	$ 14,440
N01HV32980-08	Collaborative Studies on Coronary Artery Surgery	Kaiser, G. C.	St. Louis U. Sch. of Med. St. Louis, MO	$ 28,701
N01HV32978-10	Collaborative Studies on Coronary Artery Surgery	Kemp, H. G., Jr.	St. Luke's Hospital Center New York, NY	$ 11,049
N01HV72952-03	Clinical Center for Propranolol Heart Trial	Kohn, R. M.	State Univ. of New York New York, NY	$ 20,873
N01HV72959-05	Clinical Center for Propranolol Heart Trial	Kramer, R. J.	L. Is. Jewish-Hillside MC Long Island, NY	$ 19,498
N01HV72968-05	Clinical Center for Propranolol Heart Trial	Kuo, P. T.	Coll. Med. and Den. of NJ Newark, NJ	$ 17,562
N01HV82903-03	Clinical Center for Propranolol Heart Trial	Laubach, C. A.	Inst. Med. Educ. and Res.	$ 17,238
N01HV72960-03	Clinical Center for Propranolol Heart Trial	Lichstein, E.	Maimonides Medical Center New York, NY	$ 24,784

HEART AND CIRCULATION (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01HL23618-02	Substrate Metabolism in Isolated Myocytes in Shock	Liu, M. S.	Wake Forest University Winston-Salem, NC	$ 11,494
R01HL20206-03	Carbohydrates-Nucleotides and Adrenergic Interactions	Malik, K. U.	Univ. Tenn. Hlth. Sci. Ctr. Memphis, TN	$ 34,309
N01HV72965-05	Clinical Center for Propranolol Heart Trial	Maurice, G. L.	Providence Medical Center Providence, RI	$ 47,160
N01HV72956-03	Clinical Center for Propranolol Heart Trial	McNamara, J. J.	Pacific Hlth. Res. Inst. Honolulu, HI	$ 22,067
Y01HV80044-02	Services To Be Supplied by the VA for NHLBI	Michau, E. D.	Veterans' Administration Washington, DC	$ 14,081
Y01HV90008-00	Support Services--NHLBI Propranolol Coordinating Center	Micheau, E. D.	Veterans' Administration Washington, DC	$ 7,500
N01HV82900-05	Clinical Center for Propranolol Heart Trial	Miller, R. R.	Baylor Coll. of Medicine Houston, TX	$ 31,529
R01HL20476-03S1	Effects of Diabetes on Cardiac Performance	Miller, T. B., Jr.	Univ. of Mass. Med. Sch. Boston, MA	$ 3,471
R01HL20388-04	Regulation of Protein Turnover in Diabetic Heart	Morgan, H. E.	Penn. St. Univ. Med. Sch. Hershey, PA	$ 87,097
N01HV92902-00	Twenty-Four Hour Ambulatory ECG Analysis Center for BHAT	Morganroth, J.	Anthropometrics Heart Clinic NJ	$ 47,255
R01HL19644-04	Etiological Factors in Hypertension	Mulrow, P. J.	Medical College of Ohio Toledo, OH	$ 69,392
R01HL20484-04	Effects of Diabetes on Cardiac Function and Metabolism	Neeley, J. R.	Penn. St. Univ. Med. Ctr. Hershey, PA	$ 50,440
N01HV82901-03	Clinical Center for Propranolol Heart Trial	Peters, R. W.	UCLA Los Angeles, CA	$ 25,628
R01HL20645-02	Etiology of Myocardial Infarction	Phillips, G. B.	Roosevelt Hospital New York, NY	$ 58,879
N01HV82904-03	Clinical Center for Propranolol Heart Trial	Prout, T. E.	Greater Baltimore Med. Ctr. Baltimore, MD	$ 9,741

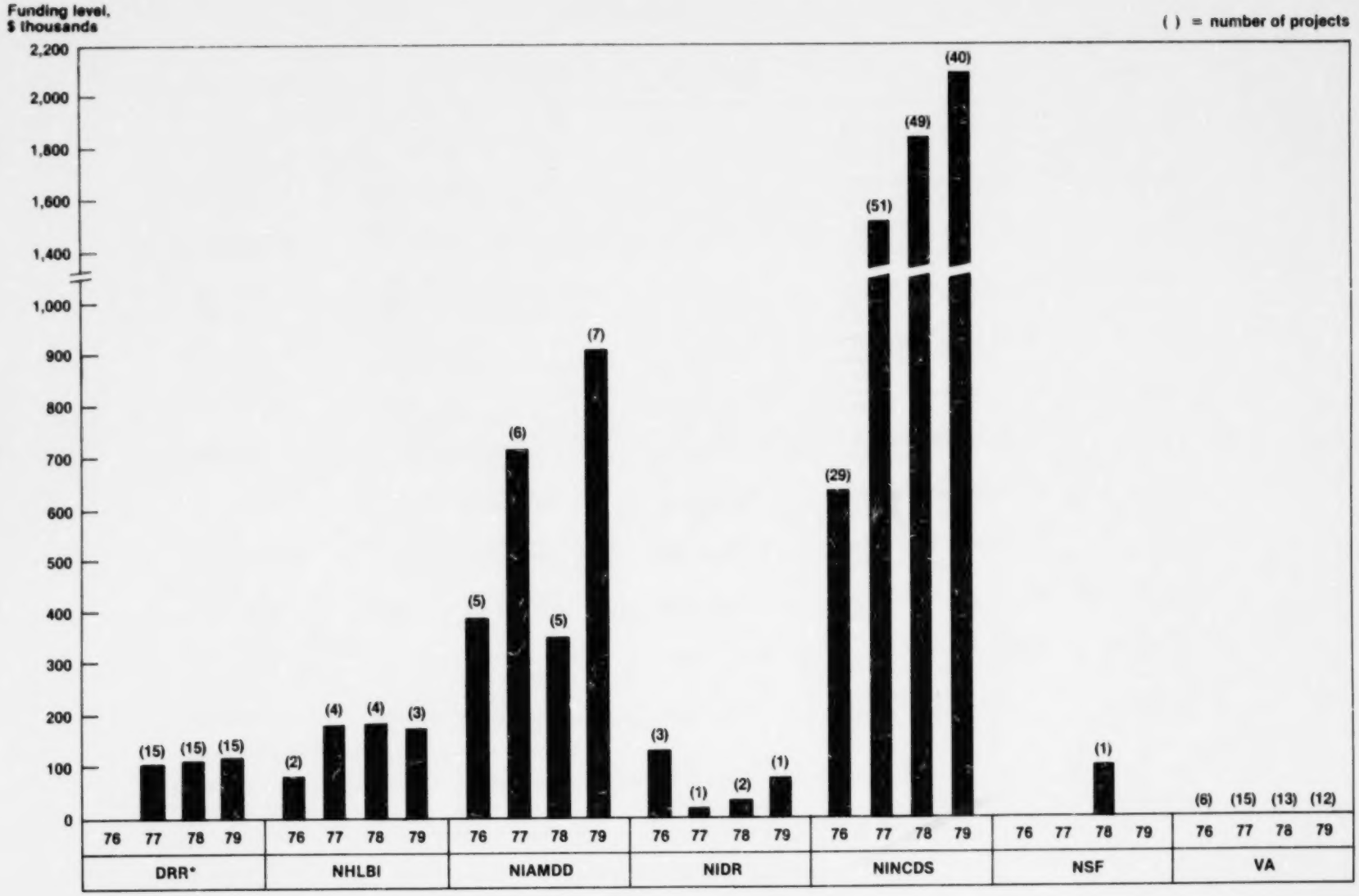
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
P50HL17667-05	Study of Ischemic Heart Disease	Rackley, C. E.	Univ. of Alabama Birmingham, AL	$ 74,598
N01HV72961-04	Clinical Center for Propranolol Heart Trial	Ranheim, P. J.	Mount Sinai Hospital New York, NY	$ 23,430
R01HL09914-14	The Myocardium in Diabetes Mellitus	Regan, T. J.	Coll. Med. and Dent., NJ Newark, NJ	$ 175,497
P50HL17648-05	Study of Ischemic Heart Disease	Resnekov, L.	University of Chicago Chicago, IL	$ 53,205
N01HV82906-03	Clinical Center for Propranolol Heart Trial	Richardson, D. W.	Virginia Commonwealth Univ. Richmond, VA	$ 24,290
P50HL17670-05	Study of Ischemic Heart Disease	Rosati, R. A.	Duke University Durham, NC	$ 67,159
P50HL17682-05	Study of Ischemic Heart Disease	Ross, J., Jr.	Univ. of California San Diego, CA	$ 64,391
P01HL18646-04	Studies Basic to Heart Transplantation	Russell, P. S.	Massachusetts Gen. Hosp. Boston, MA	$ 19,645
N01HV62923-06	Collaborative Studies in Coronary Artery Surgery	Ryan, T. J.	Boston U. Med. Ctr./U. Hosp. Boston, MA	$ 22,840
R01HL21482-02	Cardiac Function and Metabolism in Diabetes	Scheuer, J.	Montefiore Hosp./Med. Ctr. Bronx, NY	$ 70,798
N01HV82902-03	Clinical Center for Propranolol Heart Trial	Schlant, R. D.	Emory University Atlanta, GA	$ 28,249
N01HV72967-04	Clinical Center for Propranolol Heart Trial	Schoenberger, J. A.	Rush-Pres. St. Luke's MC Chicago, IL	$ 31,143
R01HL18089-05	Fatty Acid Metabolism in Heart and Its Regulation	Schulz, H. H.	City Coll. of New York New York, NY	$ 65,464
R01HL20428-04	The Juvenile Diabetic Heart	Scott, R. C.	Univ. of Cincinnati Cincinnati, OH	$ 132,070
P50HL17646-05	Study of Ischemic Heart Disease	Sobel, B. E.	Washington University St. Louis, MO	$ 64,394
R01HL20426-04	Myocardial Function in Diabetes Mellitus	Sonnenblick, E. H.	Yeshiva University New York, NY	$ 166,040

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV62921-08	Collaborative Studies in Coronary Artery Surgery	Sosa, J.	Albany Medical College Albany, NY	$ 14,680
R01HL24672-02	Vascular Control in Experimental Diabetes Mellitus	Sparks, H. V.	Michigan State Univ. East Lansing, MI	$ 69,672
P01HL13108-10	Clinical Heart Transplantation	Stinson, E. B.	Stanford University Stanford, CA	$ 69,299
P50HL17651-05	Ischemic Heart Disease (SCOR)	Swan, H. J.	Cedars-Sinai Medical Center CA	$ 47,239
N01HV82910-01	Clinical Center for Propranolol Heart Trial	Theroux, P. A.	Montreal Heart Institute Montreal, Canada	$ 20,228
N01HV72951-04	Clinical Center for Propranolol Heart Trial	Vokonas, P. S.	Boston University Boston, MA	$ 28,129
Y01HV80011-02	Agreement for Reimbursable Services Provided by VA	Walsh, J. J.	Veterans' Administration Washington, DC	$ 37,369
P50HL17655-05	Study of Ischemic Heart Disease	Weisfeldt, M. L.	The Johns Hopkins Univ. Baltimore, MD	$ 64,588
R23HL21842-02	Control of Sugar Entry in Normal and Diabetic Heart	Whitfield, C. F.	Penn. State U. Med. Ctr. Hershey, PA	$ 38,073
P50HL17669-05	Ischemic Heart Disease Center (SCOR)	Willerson, J. T.	U. Texas Hlth. Sci. Ctr. Dallas, TX	$ 41,003
N01HV72955-03	Clinical Center for Propranolol Heart Trial	Wilner, G. N.	Evanston Hospital Evanston, IL	$ 20,225
N01HV72966-04	Clinical Center for Propranolol Heart Trial	Yu, P. N.	Univ. of Rochester Rochester, NY	$ 30,212
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM25632-02	Primary Myocardial Disease in the Diabetic Mouse	Giacomelli, F.	Wayne St. Univ. Med. Coll. Detroit, MI	$ 59,683
R01AM25697-01	Blood Flow to the Islets of Langerhans	Lifson, N.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 40,516

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of General Medical Sciences				
GM23145	Hormonal and Cardiovascular Response to Trauma	Gann, D.	Brown University Providence, RI	$ 26,180
Veterans' Administration				
67836115-1	Effect of Extracellular Fluid Volume on Hemodynamics	Katz, M.	VAMC Tucson, AZ	*
53334871-12	Hemodynamic Evaluation of the Diabetic and Amputee Patient	Lee, B.	VAMC Castle Point, NY	*
57833632-1	The Valsalva Maneuver as a Means of Studying Dicrotism	Meadows, W.	VAMC Chicago, IL	*
58042538-1	Non-Invasive Method (Xenon 133 Inhalation) for Measuring Regional Cerebral Blood Flow in Man	Meyer, J.	VAMC Houston, TX	*
63043142-1	Cardiac Function in Diabetes Mellitus	Rubler, S.	VAMC New York, NY	*
52842824-6	Measurement of Limb Blood Flow by the Xenon Clearance Technique in Man	Steinbach, J.	VAMC Buffalo, NY	*
56137250-1	Myocardial Function in Diabetes Mellitus	Wu, C.	VAMC E. Orange, NJ	*

* Funding information not available.

Central and Peripheral Nervous System (B 13)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated only).

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
R01HL22581-03	Neurocirculatory Control in Diabetes Mellitus	Eckberg, D. L.	Virginia Commonwealth Univ. Richmond, VA	$ 40,007
R01HL20400-04	Diabetic Neuropathy and Peripheral Vascular Disease	Grover-Johnson, N. M.	New York University New York, NY	$ 55,143
R01HL22106-03	Diabetic Cerebral Vascular Structure and Function	Tornheim, P. A.	Univ. of Cincinnati Cincinnati, OH	$ 76,891
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM15019-09	Neuropathy in Diabetes: Role of Sorbitol Pathway	Gabbay, K. H.	Children's Hosp. Med. Ctr. Boston, MA	$ 80,158
P01AM18811-05	Brain Peptides on Pituitary Functions and in Diabetes	Guillemin, R. C.	San Diego State Univ. San Diego, CA	$ 369,847
R01AM25220-01	Central Nervous System Control of Endocrine Pancreas	Jeanrenaud, B.	Switzerland Univ. Med. Sch. Geneva, Switzerland	$ 40,000
R01AM21476-03	Hypothalamic Glucoreceptor Potentials--Pharmacology	Marrazzi, M. A.	Wayne St. Univ. Med. Coll. Detroit, MI	$ 41,875
R01AM19645-03	Diabetic Autonomic Neuropathy	Nelson, J. S.	Washington Univ. Med. Sch. St. Louis, MO	$ 77,831
R01AM22090-02	Gastrointestinal Function in Diabetes Mellitus	Soergel, K. H.	Medical Coll. of Wisconsin WI	$ 55,005
R01AM04722-19	Studies Related to the Complications of Diabetes	Winegrad, A. I.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 237,023
National Institute of Dental Research				
R01DE04730-01	Salivary Glands and Their Innervation in Diabetes	Hanker, J. S.	Univ. of North Carolina Chapel Hill, NC	$ 70,306

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Neurological and Communicative Disorders and Stroke				
P50NS08075-10	Laboratory of Peripheral Nerve Morphology (Rats, Mice, Cats)	Asbury, A. K.	Univ. of Pennsylvania Philadelphia, PA	*
R01NS11773-04	Regulation of Glycolysis in Brain (Rats)	Basford, R. E.	Univ. of Pittsburgh Pittsburgh, PA	$ 46,100
P50NS14304-02	NMR Studies on Normal and Degenerated Peripheral Nerve Tissues (Human, Rats)	Bauman, W. J.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Autonomic Neuropathies--DBH Content in Lumbar Sympathetic Ganglia (Human)	Brimijoin, W. S.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Mayo Peripheral Neuropathy Clinical Research Center	Dyck, P. J.	Mayo Foundation Rochester, MN	$ 463,500
P50NS14304-02	Diabetic Neuropathy--Ultrastructure, Action Potentials, Axonal Transport (Human)	Dyck, P. J.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Transplanting Human Diabetic Schwann Cells to Sciatic Nerve of Mice	Dyck, P. J.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Autonomic Neuropathy--Electrophysiology Study of Neuronal Connectivity (Rodents)	Dyck, P. J.	Mayo Foundation Rochester, MN	*
Z01NS01039-17	Amyotrophic Lateral Sclerosis, Other Lower Motor Neuron Diseases, and Peripheral Neuropathies	Engel, W.	NINCDS, NIH Bethesda, MD	$ 359,100
R01NS11002-05	Factors Affecting Recovery from Brain Damage (Rats, Mice)	Finger, S.	Washington University St. Louis, MO	$ 13,500
Z01NS02162-04	Synthesis of Compounds Analogous to Glycolipids	Gal, A.	NINCDS, NIH Bethesda, MD	$ 41,040

* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01NS10571-08	Growth and Atrophy of Skeletal Muscle (Rats, Mice, Rabbits, Bacteria, Human)	Goldberg, A. L.	Harvard Medical School Boston, MA	$ 44,300
R01NS08384-11	Control of Contraction in Striated Muscle (Frogs, Barnacles, Rats)	Gordon, A. M.	Univ. of Washington Seattle, WA	$ 11,700
P50NS06826-11	Cerebrospinal Fluid in Diabetes Mellitus (Human)	Heck, A.	Univ. of Tennessee Memphis, TN	*
P50NS14304-02	Induction of Neuropathy by Modification of Membrane Lipids (Rats, Human)	Holman, R. T.	Mayo Foundation Rochester, MN	*
R01NS15204-01	Peripheral Nerve Basement Membranes in Human Diabetes	Johnson, P. C.	Univ. of Arizona Tucson, AZ	$ 82,600
R01NS14911-01	Mechanisms of Inner Ear Dysfunction in Diabetes (Chinchillas)	Juhn, S. K.	Univ. of Minnesota Hosp. Minneapolis, MN	$ 39,700
P50NS10939-07	Hemorrhagic Shock Effects on Function and Structure	Kovack, A. G. B.	Univ. of Penn. Hosp. Philadelphia, PA	*
P50NS14304-02	Diabetic Neuropathy--Effect of Dietary Galactose (Rats)	Low, P. A.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Autonomic Neuropathy--Action Potential, Axoplasmic Transport, Morphometry (Human)	Low, P. A.	Mayo Foundation Rochester, MN	*
Z01NS01942-08	The Role of Cyclic AMP and Cyclic GMP in the Central Nervous System	Lust, W.	NINCDS, NIH Bethesda, MD	$ 41,040
R01NS11941-05	Metabolism and Function in Peripheral Nerve (Rats)	McDougal, D. B, Jr.	Washington University St. Louis, MO	$ 73,200
R01NS15499-01	Role of Axoplasmic Transport in Diabetic Neuropathy (Rats)	Mendell, J. R.	Ohio State University Columbus, OH	$ 48,200

* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.

CENTRAL AND PERIPHERAL NERVOUS SYSTEM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
P50NS14304-02	Diabetic Neuropathy--Morphometric, Pathologic, Immunopathologic Studies (Human)	Okazaki, H.	Mayo Foundation Rochester, MN	*
P50NS12776-04	Modification of Cerebral Action of Drugs by Somatostatin (Human)	Papavasiliou, P. S.	Cornell University Ithaca, NY	*
R01NS14162-02	Pathogenesis of Toxic and Metabolic Neuropathies (Rats)	Powell, H. C.	Univ. of CA, San Diego La Jolla, CA	$ 41,300
Z01NS01808-10	Glycoproteins of Myelin in Development and Disease	Quarles, R.	NINCDS, NIH Bethesda, MD	$ 312,930
P50NS10939-07	Mathematical Analysis of Regional Cerebral Hemodynamics and Metabolic Data	Reneau, D. D., Jr.	Univ. of Pennsylvania Hosp. Philadelphia, PA	*
R01NS11299-05	Studies of Nerve Development (Chick Embryo)	Roisen, F. J.	Rutgers Medical School Piscataway, NJ	$ 17,100
R01NS12881-04	Disorders of Cochlear Homeostasis and Function (Guinea Pigs)	Schacht, J. H.	Kresge Hearing Res. Inst. Ann Arbor, MI	$ 21,000
P50NS14304-02	Structure, Function, and Turnover of Membrane Phospholipids (Rats)	Schmid, H. H. O.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Diabetic Neuropathy--Normalization of Hyperglycemia and Nerve Function (Human)	Service, F. J.	Mayo Foundation Rochester, MN	*
P50NS14304-02	Clinical Trials--Hyperglycemia Control Effect on Nerve Structure, Function	Service, F. J.	Mayo Foundation Rochester, MN	*
R01NS07838-11	Mechanisms of Cellular Damage in the Brain (Rats)	Siesjo, B. K.	University Hospital Lund, Sweden	$ 31,400
P50NS10939-07	Electrode Development--Ion Movement in Hypoxia (Rats)	Silver, I. A.	Univ. of Penn. Hosp. Philadelphia, PA	*

* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Z01NS02282-03	Effect of Interference with CSF Dynamics on Survival Rate of Mongolian Gerbils Subject to Cerebral Ischemia	Smialek, M.	NINCDS, NIH Bethesda, MD	$ 17,955
Z01NS01995-07	Morphological Studies of Myelin Formation, Breakdown, and Regeneration	Webster, H.	NINCDS, NIH Bethesda, MD	$ 318,060
R01NS09910-09	Hexokinase and Energy Metabolism in the Brain	Wilson, J. E.	Michigan State Univ. East Lansing, MI	$ 28,900
P50NS14304-02	Diabetic Neuropathy--Lipid Composition of Diabetic Nerve (Human)	Yao, J. K.	Mayo Foundation Rochester, MN	*
Z01NS01586-12	Trophic Neuronal Function in Peripheral Nervous System	Zalewski, A.	NINCDS, NIH Bethesda, MD	$ 30,780
Veterans' Administration				
64229920-1	Oral Sensory Receptors--Mechanisms of Taste and Applications	Cagan, R.	VAMC Philadelphia, PA	**
58941537-1	Mechanisms Regulating Gastric Emptying and Motility	Cooke, A.	VAMC Kansas City, MO	**
65041470-1	The Effect of Metoclopramide on Antral Motility in Normal Controls and in Diabetic Neuropathy	Fox, S.	VAMC Providence, RI	**
66343218-1	Regulation of Sympathetic Nervous System Activity in Diabetes Mellitus	Halter, J.	VAMC Seattle, WA	**
68837810-1	The Mechanism of Remote Effects of Carcinoma on Nerve and Muscle	Hawley, R.	VAMC Washington, DC	**
64021493-1	Investigation of Synaptic Physiology	Hofmann, W.	VAMC Palo Alto, CA	**

* Denotes subdivision of a major research study whose dollar value has already been accounted for in this analysis.

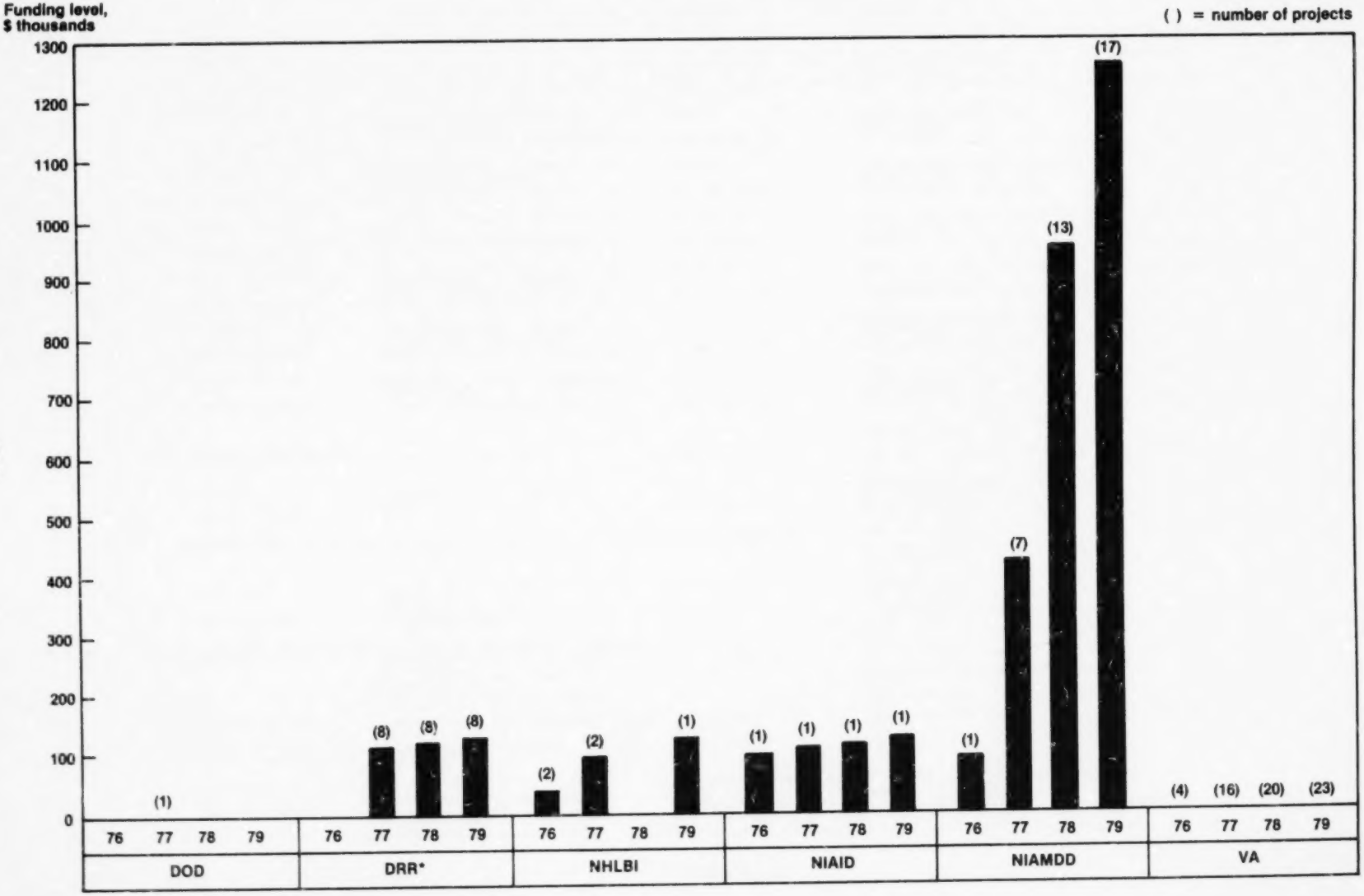
** Funding information not available.

CENTRAL AND PERIPHERAL NERVOUS SYSTEM (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
58043066-6	Sleep-Related Erections, Mechanisms of Erection, and the Diagnosis of Impotence	Karacan, I.	VAMC Houston, TX	*
63539677-1	Audiometric Characteristics in Central Nervous System Lesions	Keim, R.	VAMC Oklahoma City, OK	*
54340300-1	Clinical Relationships of Nerve Growth Factor and Its Receptors to Pathologic State in Man and Animals	Pulliam, M.	VAMC Columbia, MO	*
54941836-2	Gastric Acid Secretion and Buffer Content After Eating	Richardson, C.	VAMC Dallas, TX	*
52337404-6	Clinical Evaluation of Movement Disorders Through Reflex Testing	Sax, D.	VAMC Boston, MA	*
0039750-1	Objective Evaluation of Shoe Correction in Diabetic Feet by the Use of a Force Transducer	Tiongson, J.	VAMC Albany, NY	*

* Funding information not available.

Nephropathy (B 14)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

NEPHROPATHY

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
R01HL23749-01	Hemodynamic and Permselectivity in Diabetic Glomerulopathy	Mauer, S. M.	Univ. of Minnesota St. Paul, MN	$ 121,193
National Institute of Allergy and Infectious Diseases				
R01AI10704-19	Renal Disease in Childhood (Human)	Michael, A.	Univ. of Minnesota St. Paul, MN	$ 123,996
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R01AM20742-02	Study of Effects of Diabetic Control on Renal Disease	Barbosa, J. J.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 101,569
R01AM16928-05	Renal Ion Transport	Broosky, W. A.	Mt. Sinai Medical School New York, NY	$ 104,950
R01AM23060-02	Method of Treatment and Nephropathy in Diabetic Dogs	Buchwald, H.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 110,434
R01AM03602-21	Renal Substrate Utilization in Relation to Function	Cohen, J. J.	Rochester Univ. Med. Sch. Rochester, NY	$ 95,397
R01AM20385-03	Chemistry of Glomerular Basement Membrane Collagens	Dixit, S. N.	Tennessee Univ. Med. Coll. Memphis, TN	$ 46,314
R01AM12443-11	Renal Ammonia Metabolism	Goldstein, L.	Brown Univ. Med. Sch. Providence, RI	$ 56,800
R01AM18381-06	Studies on the Structure of Basement Membranes	Hudson, B. G.	Kansas Univ. Med. Sch. Kansas City, KS	$ 77,935
R01AM21169-02	Pathogenesis of Human Diabetic Nephropathy	Hudson, B. G.	Kansas Univ. Med. Sch. Kansas City, KS	$ 42,050
R01AM12619-11	Active Sugar Transport in Renal Cells	Kleinzeller, A.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 101,164
R01AM17713-04	A New Cycle for Ammonia Production in the Kidney	Lowenstein, L. M.	University Hospital Boston, MA	$ 89,978
R01AM20766-03	Pathogenesis of Glomerular Microangiopathy	Mohos, S. C.	New York Med. Coll. Valhalla, NY	$ 89,567

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM20735-03	Effect of Islet Implants on Diabetic Nephropathy	Pennell, J. P.	Miami Univ. Med. Sch. Coral Gables, FL	$ 77,700
R01AM21289-03	Membrane Enzyme Function in Diabetic Kidney	Queener, S. I.	Indiana Univ. Med. Sch. Indianapolis, IN	$ 39,277
R01AM25622-01	Factors Modifying Development of Diabetic Nephropathy	Rabkin, R.	Inst. M.R. Santa Clara Co. San Jose, CA	$ 108,905
R01AM23060-01S1	Method of Treatment and Nephropathy in Diabetic Dogs	Ruchwald, H.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 3,710
R01AM21956-01A1	Glomerular Mesangial Myosin in Diabetic Nephropathy	Scheinman, J. I.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 47,334
R01AM21454-02	Renal Water and Ion Transport: Role of Proteins	Singer, I.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 69,073
Veterans' Administration				
53737652-1	Hydrogen Ion Secretion in Uremia	Arruda, J.	VAMC West Side Chicago, IL	*
69139050-1	Diabetic Nephropathy - Studies on Peritoneal Dialysis	Blumenkrantz, M.	VAMC Wadsworth Los Angeles, CA	*
54941431-5	The Effect of Hemodialysis and Renal Transplantation on Energy Metabolism	Cotton, J.	VAMC Dallas, TX	*
63539127-13	Immunosuppressive and Anti-Inflammatory Treatment of Glomerulopathies	Czerwinski, A.	VAMC Oklahoma City, OK	*
63635595-3	Peripheral Neuropathy, Altered Thiamine Metabolism in Dialyzed Patients	Egan, J.	VAMC Omaha, NB	*
64241917-2	Potassium Kinetics - Effect of Hemodialysis	Feig, P.	VAMC Philadelphia, PA	*

* Funding information not available.

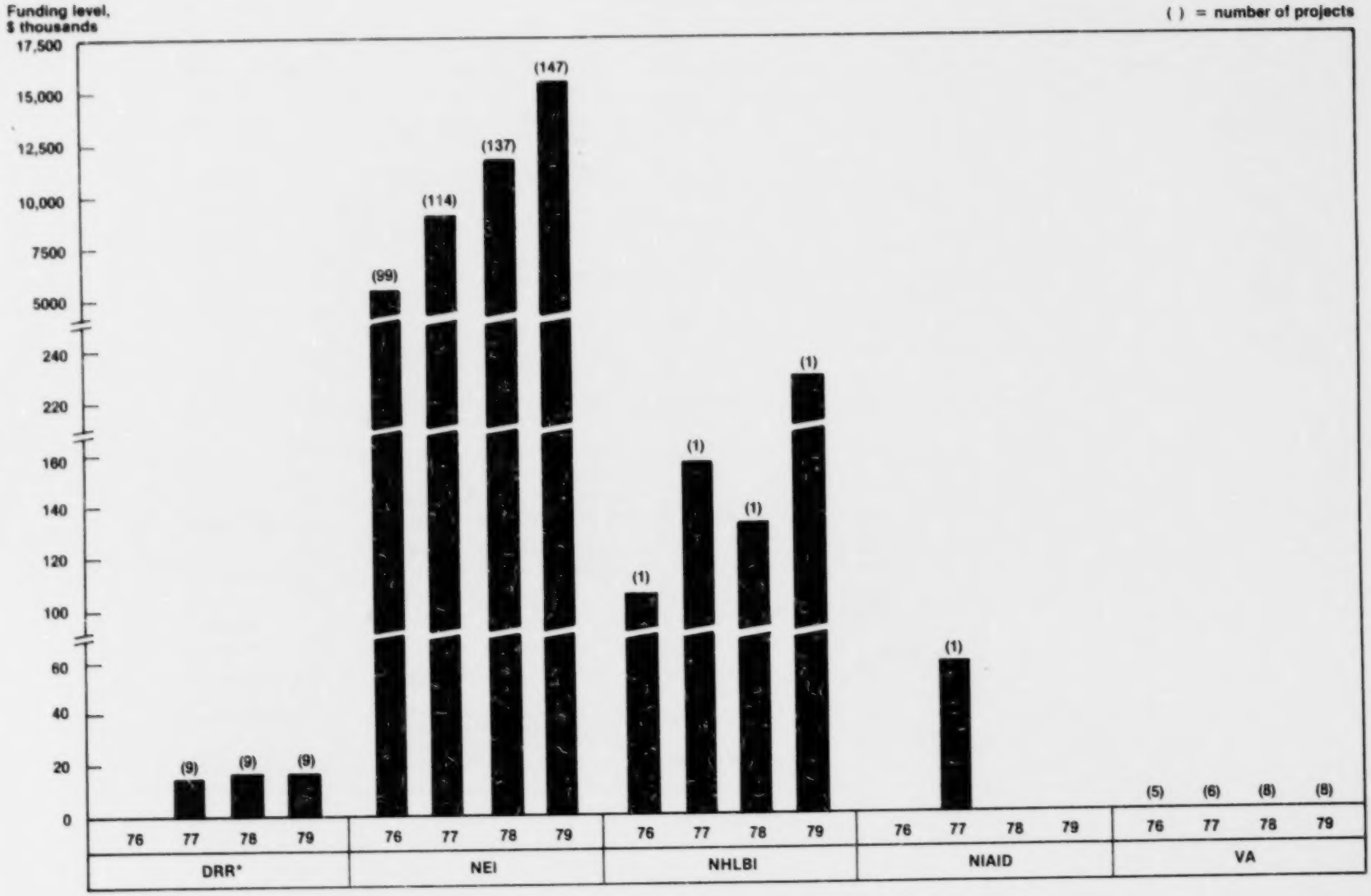
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
58041526-1	Abnormalities of Carbohydrate Metabolism in Chronic Uremia	Garber, A.	VAMC Houston, TX	*
63042278-5	Cardiac Function in Patients with Chronic Renal Failure	Katz, L.	VAMC New York, NY	*
54933591-2	Energy Metabolism in Uremia	Knochel, J.	VAMC Dallas, TX	*
69140166-1	Nephrotic Syndrome and Renal Vein Thrombosis	Llach, F.	VAMC Wadsworth Los Angeles, CA	*
52743644-1	Cold Insolule Globulin (CIG) in Diabetic Nephropathy and Other Renal Diseases	Lundin, A.	VAMC Brooklyn, NY	*
67831230-1	Functional Integrity of the Transplanted Kidney	Ogden, D.	VAMC Tucson, AZ	*
54636652-2	Ultrastructural Immunohistologic Lesions in the Nephrotic Syndrome	Pardo, V.	VAMC Miami, FL	*
50640889-4	Evaluation of Nephrotoxicity Due to Radiographic Contrast Media - A Clinical Study	Port, F.	VAMC Ann Arbor, MI	*
58343078-1	Membrane Enzyme Function in Diabetic Kidney	Queener, S.	VAMC Indianapolis, IN	*
64036415-2	Insulin Resistance, Hyperglycemia and Hypertriglyceridemia in Uremia	Reaven, G.	VAMC Palo Alto, CA	*
52137397-1	Physiology and Biochemistry of the Isolated Perfused Mammalian Kidney	Rostand, S.	VAMC Birmingham, AL	*
69532583-2	Free Fatty Acids in Uremia	Roth, D.	VAMC Wood, WI	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
66441628-1	Impact of Hemodiafiltration on the Carbohydrate and Lipid Abnormalities of Patients on Maintenance Hemodialysis	Sanfelippo, M.	VAMC San Diego, CA	*
61434703-2	The Glucose Intolerance of Uremia	Solomon, S.	VAMC Memphis, TN	*
64029280-1	The Role of the Kidney in the Metabolism of Insulin	Swenson, R.	VAMC Palo Alto, CA	*
64038373-2	Acetate Metabolism in Normal Man and in Dialysis Patients	Weiner, M.	VAMC Palo Alto, CA	*
60038620-1	Noninvasive Techniques for the Diagnosis of Renal Amyloidosis	Winer, R.	VAMC Long Beach, CA	*

* Funding information not available.

Ocular Complications (B 15)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Eye Institute				
EY52143	Evaluate Early Vitrectomy in Diabetic Retinopathy	Aaberg, T. M.	Med. Coll. of Wisconsin Milwaukee, WI	$ 71,573
R01EY02271-02	Vision and Blood Flow in Retinal Vascular Disease	Adams, A. J.	Univ. of California Berkeley, CA	$ 83,346
EY42170	Diabetic Retinopathy -- Clinical Center	Aiello, L. M.	Joslin Diabetes Fdn. Boston, MA	$ 9,765
EY72145	Evaluate Early Treatment of Diabetic Retinopathy	Aiello, L. M.	Joslin Diabetes Fdn. Boston, MA	$ 314,841
R01EY03243-01	Angiogenesis in the Mouse Eye	Auerbach, R.	Univ. of Wisconsin Madison, WI	$ 78,292
EY00022-05	Urokinase Central Retinal Vein Occlusion Trial	Ballintine, E. J.	NEI, NIH Bethesda, MD	$ 25,682
EY52147	Evaluate Early Vitrectomy in Diabetic Retinopathy	Bartsch, G.	Univ. of Minnesota Minneapolis, MN	$ 176,650
P50EY00336-12S1	Glaucoma Clinical Research Center	Becker, B.	Washington Univ. St. Louis, MO	$ 165,161
EY42142	Clinical Study of Diabetic Retinopathy	Berrocal, J.	U. of Puerto Rico Med. Sci. San Juan, PR	$ 3,005
EY82103	Evaluate Early Treatment in Diabetic Retinopathy	Berrocal, J.	U. of Puerto Rico Med. Sci. San Juan, PR	$ 99,147
EY52142	Evaluation of Early Vitrectomy in Diabetic Retinopathy	Blankenship, G.	University of Miami Miami, FL	$ 86,052
EY82102	Evaluate Early Treatment of Diabetic Retinopathy	Blankenship, G.	University of Miami Miami, FL	$ 50,603

OCULAR COMPLICATIONS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIAGATOR	LOCATION	FUNDING
EY72139	Evaluate Early Treatment of Diabetic Retinopathy	Bresnick, G. H.	University of Wisconsin Madison, WI	*
RO1EY03084-01	Electroretinographic Studies in Diabetic Retinopathy	Bresnick, G. H.	University of Wisconsin Madison, WI	$ 79,711
R10EY02553-01	Macular Photocoagulation Study	Burton, T. C.	University of Iowa Iowa City, IA	$ 49,985
EY82101	Evaluate Early Treatment of Diabetic Retinopathy	Cavender, J. C.	Pacific Medical Center San Francisco, CA	$ 44,598
R10EY03284-01	Macular Photocoagulation Study	Chandra, S. R.	University of Wisconsin Madison, WI	$ 54,300
RO1EY01399-05	Biochemical Studies of Proliferative Retinopathies	Chen, C.	Johns Hopkins University Baltimore, MD	$ 105,659
EY62141	Evaluate Early Vitrectomy in Diabetic Retinopathy	Chenoweth, R. G.	Good Sam. Hosp. Med. Ctr. Portland, OR	$ 75,406
RO1EY02896-01	Genetics and Biochemistry of the Lens in Cell Culture	Church, R. L.	Eye and Ear Hosp. of Pitt. Pittsburgh, PA	$ 61,614
RO1EY01276-06	Lens Metabolism and Cataract Formation	Chylack, L. T., Jr.	Harvard University Boston, MA	$ 224,932
R10EY02468-02	Branch Vein Occlusion Collaborative Study	Clarkson, J. G.	University of Miami Miami, FL	$ 168,033
RO1EY01837-03	Change of the Hormonal Status in Diabetic Retinopathy	Cohen, A. M.	Hebrew Univ. of Jerusalem Jerusalem, Israel	$ 47,673
RO1EY02905-01	Insulin and Growth Hormone Receptors in Retinal Vessels	Cotlier, E. M.	Yale University New Haven, CT	$ 100,645
RO1Y00404-08	Biochemical Interactions of Insulin with the Lens	Coulter, J. B.	Scott and White Mem. Hosp. Temple, TX	$ 48,630
RO1EY03106-01	Blood-Retinal Barrier in Diabetes Mellitus	Cunha-Vaz, J. G.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 127,494

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
EY32130	Study of Diabetic Retinopathy	Davis, M. D.	University of Wisconsin Madison, WI	*
EY52148	Evaluate Early Vitrectomy in Diabetic Retinopathy	Davis, M. D.	University of Wisconsin Madison, WI	$ 125,577
EY72148	Evaluate Early Treatment of Diabetic Retinopathy	Davis, M. D.	University of Wisconsin Madison, WI	$ 205,050
R01EY02094-02	Trichromatic Oximetry of Retinal Vessels	Delori, F. C.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 83,388
R01EY01007-06	The Eye in Malignant Hypertension	DeVenecia, G. B.	University of Wisconsin Madison, WI	$ 46,132
R01EY02034-03	Primate Retina and Choroid in Malignant Hypertension	DeVenecia, G. B.	University of Wisconsin Madison, WI	$ 65,408
R23EY02849-01A1	Pathogenesis of Exptl. Massive Periretinal Proliferation	Diddie, K. R.	Univ. of Southern Calif. Los Angeles, CA	$ 11,300
R10EY02471-02	Branch Vein Occlusion Collaborative Study	Diddie, K. R.	Univ. of Southern Calif. Los Angeles, CA	$ 80,941
R01EY00449-08	Human Cataracts and Aldose Reductase Properties	Doughty, C. C.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 34,344
R01EY03025-01	Cataract Enzyme Aldose Reductase Active Site	Doughty, C. C.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 55,815
R01EY01750-03	Pathogenesis of Iris Neovascularization	Dueker, D. K.	Mass. Eye and Ear Infirm. Boston, MA	$ 61,167
R01EY00300-14	Study of Diabetic Retinopathy	Engerman, R. L.	University of Wisconsin Madison, WI	$ 208,622
R01EY01418-05	The Etiology of Reduced Visual Function	Enoch, J. M.	University of Florida Gainesville, FL	$ 171,622

* Funding information not available.

OCULAR COMPLICATIONS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01EY02526-02	Pathophysiology of the Ocular Circulation	Ernest, J. T.	University of Wisconsin Madison, WI	$ 105,840
EY62144	Evaluate Early Vitrectomy in Diabetic Retinopathy	Federman, J.	Wills Eye Hospital Philadelphia, PA	$ 64,795
EY72150	Evaluate Early Treatment of Diabetic Retinopathy	Federman, J.	Wills Eye Hospital Philadelphia, PA	$ 56,103
R01EY01303-05	Human Retinal Blood Flow and Laser Velocimetry	Feke, G. T.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 71,881
R01EY01900-01S3	Senile Macula - Natural Course: Clinical Trial (Laser)	Fine, S. L.	Johns Hopkins University Baltimore, MD	$ 82,659
R10EY02546-01	Macular Photocoagulation Study	Fine, S. L.	Johns Hopkins University Baltimore, MD	$ 192,217
R10EY02556-01	Macular Photocoagulation Study	Fine, S. L.	Johns Hopkins University Baltimore, MD	$ 90,674
R10EY02466-02	Branch Vein Occlusion Collaborative Study: Coord. Ctr.	Finkelstein, D.	Johns Hopkins University Baltimore, MD	$ 230,844
R10EY02469-02	Branch Vein Occlusion Collaborative Study	Finkelstein, D.	Johns Hopkins University Baltimore, MD	$ 132,185
R01EY00725-08	Vitreoretinal Juncture	Foos, R. Y.	University of California Los Angeles, CA	$ 61,634
R01EY01258-05	Biochemical Studies of the Blood-Vitreous Body Barrier	Fowlks, W. L.	University of Minnesota Minneapolis, MN	$ 104,888
R01EY01857-04	Retinal Microvessels: Tissue Culture and Biochemistry	Frank, R. N.	Wayne State University Detroit, MI	$ 129,279
R01EY02566-01S1	A Proposed Model for Diabetic Retinopathy	Frank, R. N.	Wayne State University Detroit, MI	$ 3,500
R01EY02566-02	A Proposed Model for Diabetic Retinopathy	Frank, R. N.	Wayne State University Detroit, MI	$ 31,273
EY02104	Evaluate Early Vitrectomy in Diabetic Retinopathy	Frank, R. N.	Wayne State University Detroit, MI	$ 142,678

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
EY00077-02	Treatment of Neovascular Glaucoma	Gaasterland, D. E.	NEI, NIH Bethesda, MD	$ 18,689
R10EY02549-01	Macular Photocoagulation Study	Gass, D. M.	University of Miami Miami, FL	$ 61,054
R10EY02564-01	Macular Photocoagulation Study	Gitter, K. A.	Touro Infirmary New Orleans, LA	$ 30,000
R01EY02434-02	Angiogenesis, Healing, and Aging in Retina and Choroid	Goldbaum, M. H.	University of California La Jolla, CA	$ 60,411
EY32125	Study of Diabetic Retinopathy	Goldberg, M.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 9,536
EY72137	Evaluate Early Treatment of Diabetic Retinopathy	Goldberg, M.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 89,381
R01EY00002-27	Pressure-Regulating Mechanisms in Glaucoma	Grant, W. M.	Mass. Eye and Ear Infirm. Boston, MA	$ 113,633
P50EY02518-02	Glaucoma Clinical Research Center	Grant, W. M.	Mass. Eye and Ear Infirm. Boston, MA	$ 437,381
R01EY01874-03	Tissue Growth in the Normal and Injured Eye	Harding, C. V.	Wayne State University Detroit, MI	$ 71,799
R01EY01151-05	Ocular Vascular Occlusive Disorders - Clinical	Hayreh, S. S.	University of Iowa Iowa City, IA	$ 117,861
R01EY01576-05	Ocular Vascular Occlusive Disorders	Hayreh, S. S.	University of Iowa Iowa City, IA	$ 144,906
R01EY01953-03	Cytochrome Redox States in Functioning Retina	Hempel, F. G.	Duke University Durham, NC	$ 43,368
R10EY02547-01	Macular Photocoagulation Study Coordinating Center	Hillis, A.	Johns Hopkins University Baltimore, MD	$ 131,940
R01EY01763-03	Studies of Angiographic Dyes	Hochheimer, B. F.	Johns Hopkins University Baltimore, MD	$ 59,990
EY72133	Evaluate Early Treatment of Diabetic Retinopathy	Hodgkinson, B. J.	Univ. of Southern Calif. Los Angeles, CA	$ 80,330

OCULAR COMPLICATIONS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01EY00056-10	Pathogenesis of Altered Ocular Vascular Permeability	Howes, L. D., Jr.	University of California San Francisco, CA	$ 39,475
EY62139	Evaluate Early Vitrectomy in Diabetic Retinopathy	Irvine, A. R.	University of California San Francisco, CA	$ 54,847
R01EY02214-02	A Longitudinal Study of Hypertensive Retinopathy	Jampol, L. M.	Univ. of Illinois Med. Ctr. Chicago, IL	$ 43,970
EY62140	Evaluate Early Vitrectomy in Diabetic Retinopatny	Karlin, D.	Cornell Univ Med. Ctr. New York, NY	$ 101,437
R01EY02410-01	Ocular Tissue Effects of CO_2 Laser Energy	Karlin, D. B.	Cornell Univ. Med. Ctr. New York, NY	$ 115,276
EY72138	Evaluate Early Treatment of Diabetic Retinopathy	Kassoff, A.	Albany Medical College Albany, NY	$ 74,659
R01EY00393-12	Glycolipid and Glycoprotein Metabolism in Eye Tissue	Kean, E. L.	Case Western Reserve Univ. Cleveland, OH	$ 142,650
EY00003-07	Cataracts	Kinoshita, J. H.	NEI, NIH Bethesda, MD	$ 173,223
EY72134	Evaluate Early Treatment of Diabetic Retinopathy	Kinyoun, J. L.	University of Washington Seattle, WA	$ 72,862
EY42128	Clinical Study of Diabetic Retinopathy	Kinyoun, James	University of Washington Seattle, WA	$ 3,912
EY72144	Evaluate Early Treatment of Diabetic Retinopathy	Klein, M. L.	Good Sam. Hosp./Med. Ctr. Portland, OR	$ 28,374
R10EY02558-01	Macular Photocoagulation Study	Klein, M. L.	Good Sam. Hosp./Med. Ctr. Portland, OR	$ 44,825
EY32129	Study of Retinopathy	Knatterud, G. L.	University of Maryland Baltimore, MD	$ 848,089
EY72147	Evaluate Early Treatment of Diabetic Retinopathy	Knatterud, G. L.	University of Maryland Baltimore, MD	$1,137,348

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
EY32126	Study of Diabetic Retinopathy	Knoblock, W.	Univ. of Minnesota Minneapolis, MN	$ 12,444
EY72131	Evaluate Early Treatment of Diabetic Retinopathy	Knoblock, W. H.	Univ. of Minnesota Minneapolis, MN	*
EY90005	Supplies for ETDRS Clinics	Knutson, H. O.	Supply Svs. Ctr. - HSA Perry Point, MD	$ 59,479
R01EY01352-05S1	Adrenergic Physiology of the Eye	Langham, M. E.	Johns Hopkins University Baltimore, MD	$ 48,867
R01EY03076-01	Intraocular Tumor Vaporization by CO_2 Laser Radiation	L'Esperance, F. A., Jr.	Columbia University New York, NY	$ 93,613
EY72140	Evaluate Early Treatment of Diabetic Retinopathy	Little, H. L.	Zweng Mem. Ret. Res. Fdn. Menlo Park, CA	$ 8,134
R10EY03281-01	Macular Photocoagulation Study	March, W. F.	U. Okla. Hlth. Sci. Ctr. Oklahoma City, OK	$ 58,776
EY42171	Diabetic Retinopathy Study - Clinical Center	Margherio, R. R.	Wayne State University Detroit, MI	$ 11,309
EY62143	Evaluate Early Vitrectomy in Diabetic Retinopathy	Margherio, R. R.	Wayne State University Detroit, MI	$ 84,224
R10EY02563-01A1	Macular Photocoagulation Study	Margherio, R. R.	William Beaumont Hospital Royal Oak, MI	$ 53,699
R01EY01261-05	Image Processing for Clinical Ophthalmoscopy	McCormick, B. H.	University of Illinois Chicago, IL	$ 377,835
EY42172	Diabetic Retinopathy Study	McMeel, J. W.	Mass. Eye and Ear Infirm. Boston, MA	$ 7,712
EY52144	Evaluation of Vitrectomy in Diabetic Retinopathy	McMeel, J. W.	Mass. Eye and Ear Infirm. Boston, MA	$ 62,203
R01EY02164-02	Study of Retinal Circulation in Diabetes	McMeel, J. W.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 75,544

* Funding information not available.

OCULAR COMPLICATIONS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01EY01868-03	Basement Membranes of the Eye in Diabetic Retinopathy	Meezan, E.	University of Arizona Tucson, AR	$ 79,145
R10EY02548-01	Macular Photocoagulation Study	Meredith, T. A.	Med. Coll. of Wisconsin Milwaukee, WI	$ 47,239
EY52145	Evaluation of Early Vitrectomy in Diabetic Retinopathy	Michels, R. G.	Johns Hopkins University Baltimore, MD	$ 108,920
R01EY02062-02	Pathogenesis of Diabetic Retinopathy	Mukai, N.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 82,624
EY32121	Study of Diabetic Retinopathy	Myers, F. L.	University of Wisconsin Madison, WI	$ 9,725
EY52140	Evaluate Early Vitrectomy in Diabetic Retinopathy	Myers, F. L.	University of Wisconsin Madison, WI	$ 65,833
EY32118	Study of Diabetic Retinopathy	Norton, E. W. D.	University of Miami Miami, FL	$ 11,632
R10EY02467-02	Branch Vein Occlusion Collaborative Study	Orth, D. H.	Univ. of Illinois Med. Ctr. Chicago, IL	$ 127,539
R10EY03288-01	Macular Photocoagulation Study	Orth, D. H.	Ingalls Memorial Hospital Harvey, IL	$ 40,844
R01EY00902-1451	Experimental Cataracts	Patterson, J. W.	Univ. of Conn. Health Ctr. Farmington, CT	$ 30,465
R01EY02603-02	Diabetic Retinopathy: Inhibition of Neovascularization	Patz, A.	Johns Hopkins University Baltimore, MD	$ 126,758
EY32127	Study of Diabetic Retinopathy	Patz, A.	Johns Hopkins University Baltimore, MD	$ 12,065
P30EY01765-04	Core Center Grant: Wilmer Ophthalmological Institute	Patz, A.	Johns Hopkins University Baltimore, MD	$ 125,835
EY72146	Evaluate Early Treatment of Diabetic Retinopathy	Patz, A.	Johns Hopkins University Baltimore, MD	$ 58,809
R01EY00205-19	Retina and Retinal Vessels	Patz, A.	Johns Hopkins University Baltimore, MD	$ 155,737

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01EY01643-04	Sugar Transport by Mammalian Blood-Retinal Barriers	Pautler, E. L.	Colorado State University Fort Collins, CO	$ 62,882
R01EY01564-04S1	Ocular Basement Membranes in Diabetic Retinopathy	Peczon, B. D.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 1,879
R01EY01564-05	Ocular Basement Membranes in Diabetic Retinopathy	Peczon, B. D.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 74,324
EY62142	Evaluate Early Vitrectomy in Diabetic Retinopathy	Peyman, G. A.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 72,690
R01EY02725-02	Evaluate Krypton Laser in Photocoagulation Therapy	Pomerantzeff, O.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 91,764
R01EY02432-02	Cataract Therapy RBC Abnormalities in Diabetics	Prchal, J. T.	University of Alabama Birmingham, AL	$ 72,287
R01EY02316-03	Involutional Diabetic Retinopathy Study	Ramsay, R. C.	University of Minnesota Minneapolis, MN	$ 20,556
R01EY00484-12	Study of Intraocular Transport	Reddy, V. N.	Oakland University Rochester, MI	$ 213,199
EY72136	Evaluate Early Treatment of Diabetic Retinopathy	Reeser, F.	Medical Coll. of Wisconsin Milwaukee, WI	$ 58,153
EY32122	Study of Diabetic Retinopathy	Riekhof, F. T.	University of Utah Salt Lake City, UT	$ 9,908
EY72149	Evaluate Early Treatment of Diabetic Retinopathy	Riekhof, F. T.	University of Utah Salt Lake City, UT	*
RO1EY03242-01S1	Flow and Diffusion of Fluorescein in the Ocular Fundus	Riva, C. E.	University of Pennsylvania Philadelphia, PA	$ 48,509
EY52141	Evaluation of Early Vitrectomy in Diabetic Retinopathy	Ryan, S. J.	Univ. of Southern Calif. Los Angeles, CA	$ 53,716
R01EY01545-04	An Experimental Approach to Maculopathy	Ryan, S. J.	Univ. of Southern Calif. Los Angeles, CA	$ 118,725

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
P30EY01784-04	Eye Research Core Services Support	Schepens, C. L.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 117,840
R10EY02551-01	Macular Photocoagulation Study	Schlaegel, T. F.	Indiana U.- Purdue U. Indianapolis, IN	$ 41,250
R01EY02901-02	Diabetes Mellitus and the Anterior Segment of the Eye	Schultz, R. O.	Med. Coll. of Wisconsin Milwaukee, WI	$ 57,161
R01EY00936-06	Changes in the Optic Disc in Patients with Glaucoma	Schwartz, B.	New England Med. Ctr. Hosp. Boston, MA	$ 119,345
EY72132	Evaluate Early Treatment of Diabetic Retinopathy	Shabo, A. L.	University of California Los Angeles, CA	*
R10EY02554-01A1	Macular Photocoagulation Study	Singerman, L. J.	St. Luke's Hospital Cleveland, OH	$ 29,377
R01EY01883-03	Experimental Ocular Histoplasmic Choroiditis	Smith, R. E.	Univ. of Southern Calif. Los Angeles, CA	$ 77,271
R01EY00538-09S1	Ultrastructural Study of Ocular Vascular Permeability	Smith, R. S.	Albany Medical College Albany, NY	$ 60,993
R01EY01421-18	Pathogenesis of Microangiopathy in Diabetes	Soeldner, J. S.	Joslin Diabetes Fdn. Boston, MA	$ 138,123
RO1EY03229-01	Vitreo-Retinal Control of Vascular Proliferation	Sorgente, N.	Estelle Doheny Eye Fdn. Los Angeles, CA	$ 127,226
R01EY01677-05	Metabolic Studies in Normal and Cataractous Lenses	Srivastava, S. K.	Univ. of Texas Med. Br. Galveston, TX	$ 55,703
RO1EY03257-01	Protein Glycosylation in Diabetic Lens and Nerve	Stevens, V. J.	Rockefeller University New York, NY	$ 40,203
EY42173	Diabetic Retinopathy Study - Clinical Center	Straatsma, B. R.	Univ. of California Los Angeles, CA	$ 13,569
R01EY01696-04	Phase Separation of Cytoplasma in Sugar Cataracts	Tanaka, T.	Mass. Inst. of Tech. Cambridge, MA	$ 72,388

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
EY32119	Study of Diabetic Retinopathy	Tasman, W. S.	Wills Eye Hospital Philadelphia, PA	$ 10,102
R01EY03061-01	Effects of Diabetes Mellitus on Ocular Surface	Thoft, R. A.	Eye Res. Inst. of Ret. Fnd. Boston, MA	$ 33,588
R10EY02470-02	Branch Vein Occlusion Collaborative Study	Trempe, C. L.	Eye Res. Inst. of Ret. Fdn. Boston, MA	$ 110,083
R01EY01903-04	Pathology of Retinal Dysfunction	Tso, M. O.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 106,322
R01EY01904-04	Pathology of Diseases of Optic Nerve Head	Tso, M. O.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 105,565
R01EY01680-04	Morphological Studies in Experimental Cataracts	Unakar, N. J.	Oakland University Rochester, MI	$ 63,292
R01EY00874-08	Studies on Ophthalmic Diseases	Vainisi, S. J.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 85,853
EY32124	Study of Diabetic Retinopathy	Van Heuven, W. A.	Albany Medical College Albany, NY	$ 22,121
EY52146	Evaluation of Early Vitrectomy in Diabetic Retinopathy	Van Heuven, W. A.	Albany Medical College Albany, NY	$ 176,329
R01EY02160-02	Aldose Reductase in Ocular Pathology	Varma, S. D.	University of Maryland Baltimore, MD	$ 63,037
R01EY02183-02	Diabetic Retinopathy in Nonhuman Primates	Vygantas, C. M.	Univ. of Ill. Med. Ctr. Chicago, IL	$ 78,804
R01EY02299-02	Proteolytic Enzymes and Cataractogenesis	Wagner, B. J.	Coll. Med./Dent. of NJ Newark, NJ	$ 76,935
R01EY01634-04	The Blood-Retinal Barrier in Diabetic Retinopathy	Wallow, I. H.	University of Wisconsin Madison, WI	$ 83,438
R01EY02198-02	Retinal Vascular Changes in Diabetes Mellitus	Waltman, S. R.	Washington University St. Louis, MO	$ 119,752
EY80003	Evaluate Early Treatment of Diabetic Retinopathy	Watson, W. H.	U.S. Ctr. for Disease Cont. Atlanta, GA	$ 374,000

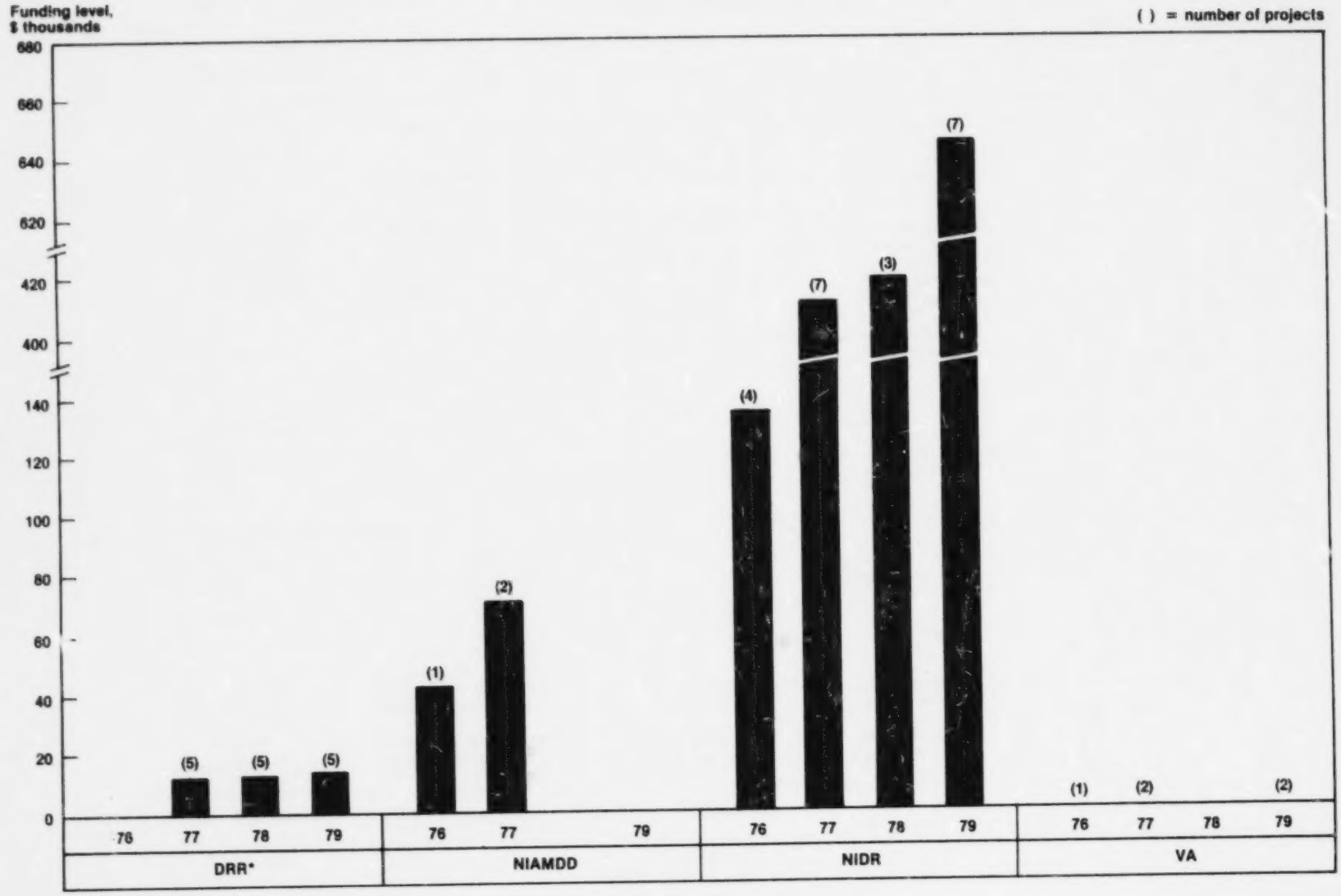
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
EY32123	Study of Diabetic Retinopathy	Watzke, R. C.	University of Iowa Iowa City, IA	$ 9,336
EY72135	Evaluate Early Treatment of Diabetic Retinopathy	Watzke, R. C.	University of Iowa Iowa City, IA	$ 39,141
RO1EY02246-02	Studies of Normal and Pathological Retinal PO_2	Weiter, J. J.	New England Med. Ctr. Hosp. Boston, MA	$ 60,574
R01EY01340-06	Corneal Electrophysiology and Ocular Barriers	Zadunaisky, J. A.	New York University New York, NY	$ 181,809
	Program Management Costs for Three Collaborative Clinical Trials (DRVS, DRS, ETDRS)	Assigned Invest.	NEI, NIH Bethesda, MD	$ 335,000
National Heart, Lung, and Blood Institute				
RO1HL20455-04	Role of Systemic Hypertension on Diabetic Retinopathy	Patz, A.	Johns Hopkins University Baltimore, MD	$ 227,801
Veterans' Administration				
60735101-2	National Collaborative Diabetic Retinopathy Study	Allen, J.	VAMC Madison, WI	*
68943704-1	Origin of the New Vessels on the Optic Disc in Proliferative Diabetic Retinopathy	Forster, S.	VAMC W. Haven, CT	*
68643937-1	Hypomagnesemia in Diabetic Retinopathy	Guruprakash, G.	VAMC Leavenworth, KS	*
53534885-6	Study of Anti-Platelet Aggregating Agents in Diabetic Retinopathy	Kwaan, H.	VAMC Lakeside Chicago, IL	*
62741353-1	Zinc Metabolism in Relation to Eye Disease	Luthra, C.	VAMC Newington, CT	*
60341727-1	Smoking and Diabetic Retinopathy	Potts, A.	VAMC Louisville, KY	*

* Funding information not available.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
52335310-1	Ocular Circulation Investigation	Price, J.	VAMC Boston, MA	*
65041929-3	Effect of Diabetic Control on the Course of Diabetic Retinopathy	Toh, S.	VAMC Providence, RI	*

* Funding information not available.

Dental Complications (B 16)



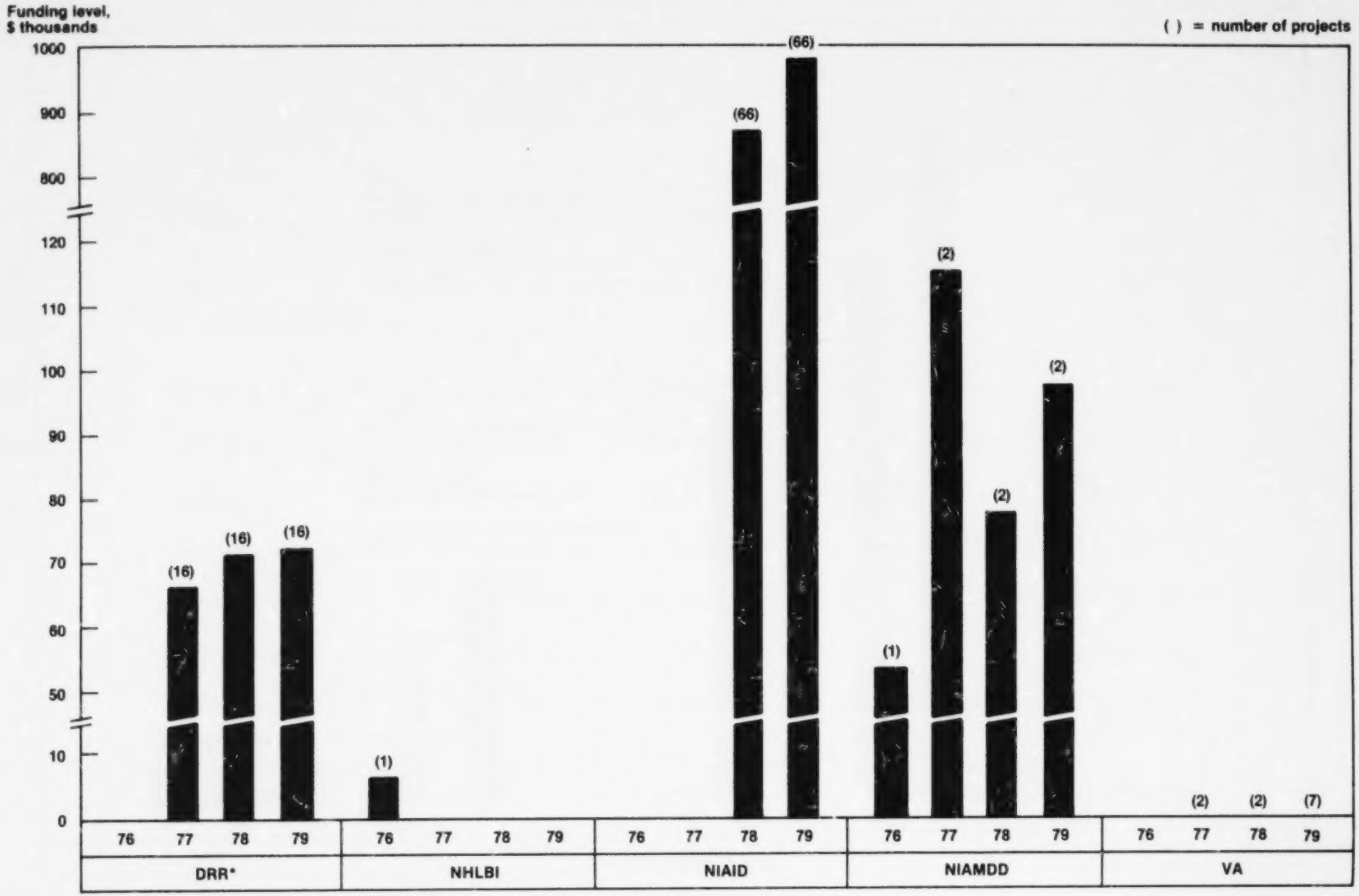
*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Dental Research				
P50DE0260012030	Chemotaxis - Its Role in Periodontal Disease	Altman, L. C.	Univ. of Washington Seattle, WA	$ 62,712
P50DE0489801002	Neutrophil Function in Periodontal Disease	Genco, R.	SUNY Buffalo, NY	$ 124,224
R01DE03987-04	Gingival Collagen Metabolism in Health and Disease	Golub, L. M.	SUNY Stony Brook, NY	$ 93,144
P50DE02731-13021	Gingivitis in Juvenile Diabetics: Periodontal Microbiology	Loesche, W. J.	Univ. of Michigan Ann Arbor, MI	$ 20,000*
Z01DE00204-02	Collagenous Matrix and Bone Differentiation	Reddi, A. H.	NIDR, NIH Bethesda, MD	$ 80,000*
R01DE03318-07A1	The Molecular Nature of Gingival and Mucosal Collagen	Schneir, M. L.	Univ. of S. California Los Angeles, CA	$ 85,712
R01DE03995-04	Leukocytes in the Pathogenesis of Periodontal Disease	Taichman, N. S.	Univ. of Pennsylvania Philadelphia, PA	$ 178,870
Veterans' Administration				
54938286-3	Oropharyngeal Carriage of Gram Negative Bacilli by Aspiration-Prone Individuals	Mackowiak, P.	VAMC Dallas, TX	**
54942223-8	Attachment of Gram Negative Bacilli to Pharyngeal Mucosal Cells	Mackowiak, P.	VAMC Dallas, TX	**

* Indicates part of a larger project.

** Funding information not available.

Infections (B 17)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Allergy and Infectious Diseases				
R01AI12936-03	Host Defense Mechanisms - Control of Surgical Infections (Human, Guinea Pig, Mice)	Alexander, W.	Univ. of Cincinnati Cincinnati, OH	$ 24,312
R01AI11827	The Function of Normal and Malignant Phagocyte Cells	Babior, B.	New England Medical Center Boston, MA	$ 15,893
R01AI10892-07	Leukocyte Metabolism Related to Recurrent Infection (Human)	Baehner, R.	Indiana University Indianapolis, IN	$ 26,643
R01AI13249	Human Immunity to Group B Streptococcus	Baker, C.	Baylor College of Medicine Houston, TX	$ 15,893
R01AI13550-04	Ligand-Receptor Interaction in Bacterial Adherence (Human)	Beachey, E.	Veterans' Admin. Hospital Memphis, TN	$ 6,684
R01AI09648	Immunologically Activated Enzyme Systems of Cells	Becker, E.	University of Connecticut Farmington, CT	$ 22,381
R01AI14387	A Novel Approach for Drugs to Candida Albicans	Becker, J.	University of Tenessee Knoxville, TN	$ 11,958
R01AI02874-21	Staphylococcal and Streptococcal Proteins (Rabbits)	Bernheimer, A.	New York Univ. Med. Ctr. New York, NY	$ 13,022
R01AI07118	Biochemical Basis of Delayed Hypersensitivity	Bloom, B.	A. Einstein Coll. of Med. Bronx, NY	$ 24,259
R01AI10108	Lethal Bacteremia	Braude, A.	University of California San Diego, CA	$ 11,925
R01AI05022	The Pathogenesis of Cryptococcosis	Bulmer, G.	U. of Okla. Hlth. Sci. Ctr. Oklahoma City, OK	$ 6,565
R01AI11950-05	Control of Hospital-Acquired Urinary Tract Infections	Burke, J.	Latter-Day Saints Hospital Salt Lake City, UT	$ 5,937
R01AI15655-01	Control of Hospital-Acquired Urinary Tract Infections (Human)	Burke, J.	Latter-Day Saints Hospital Salt Lake City, UT	$ 4,344
R01AI11240	Cell Biology of the Immune Response to Bacteria	Campbell, P.	Natl. Jewish Hosp. Res. Ctr. Denver, CO	$ 17,614

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
PO1AI13370-03	Genetics of Immune Response/ Sub-Genetic Analysis of Immunoglobulin Reaction to Purified Allergins (Humans)	Chase, G.	Good Samaritan Hospital Baltimore, MD	$ 1,537
RO1AI07012	The Physiology of Macrophages	Cohn, Z.	Rockefeller University New York, NY	$ 31,214
RO1AI155583-01	Gastrointestinal and Systemic Candidiasis (Mice)	Cole, G.	University of Texas Austin, TX	$ 21,850
PO1AI07007-0058	Immunopathologic Studies: Complement Enzymes and Regulator Proteins	Cooper, N.	Scripps Clinic and Res. Fdn. La Jolla, CA	$ 18,043
RO1AI13573	C-ASWS: A Coccidioides Cell Wall Antigen	Cox, R.	San Antonio Chest Hosp. San Antonio, TX	$ 4,514
RO1AI13512	Innate Defense Mechanism Against Candida Albicans	Cutler, J.	Montana State University Bozeman, MT	$ 7,154
RO1AI14508-02	Bladder Infection - Pathogenesis and Resistance (Rats, Rabbits)	David, C.	University of Texas Galveston, TX	$ 8,498
R22AI10921-08	Macrophage Activation and Cellular Immunity (Human, Mice, Guinea Pigs)	David, J.	Robert B. Brigaman Hosp. Boston, MA	$ 14,160
RO1AI10732	Pathophysiology and Metabolism of the Leukocyte	De Chatelet, L.	Bowman Gray School of Med. Winston-Salem, NC	$ 20,350
RO1AI15338-02	Pulmonary and Systemic Killing of Opportunistic Fungi	Diamond, R.	University Hospital Boston, MA	$ 19,682
RO1AI12806-95	Host Responses in Experimental Candidasis (Mice, Guinea Pigs)	Domer, J.	Tulane University New Orleans, LA	$ 14,718
RO1AI11644	Streptolysin O Action on Mammalian Cell Membranes	Duncan, J.	Northwestern University Chicago, IL	$ 5,082
RO1AI13926	Host Response to Group B Streptococci	Ferrieri, P.	University of Minnesota Minneapolis, MN	$ 7,495
R22AI15279-02	The Role of Bacterial Chemotaxis in Infections (Rabbits, Mice)	Freter, R.	University of Michigan Ann Arbor, MI	$ 16,927

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AI15050-01	Experimental Cryptococcosis (Fungi, Mice)	Friedman, L.	Tulane University New Orleans, LA	$ 7,320
RO1AI14533-02	Nosocomial Infection in Surgical Patients	Garibaldi, R.	Veterans' Admin. Hosp. Salt Lake City, UT	$ 11,485
RO1AI10217-10	Interferon and Host Resistance to Viral Infection (Mice, Sheep)	Glasgow, L.	University of Utah Salt Lake City, UT	$ 86,517
RO1AI11843-7	Non-Specific Resistance to Infection, Intoxication (Human, Rodents, Dog, Chicken)	Good, R.	Sloan-Kettering Institute New York, NY	$ 5,808
RO1AI07052	Bacterial Endotoxins in Infection	Greisman, S.	University of Maryland Baltimore, MD	$ 700
RO1AI13150	Mechanism of Host Resistance to Group B Streptococci	Hill, H.	University of Utah Salt Lake City, UT	$ 6,948
RO1AI15120-02	How Phagocytes Deal with Fungi	Howard, D.	University of Calif. Los Angeles, CA	$ 12,117
RO1AI13162	Genetics of Response to Histocompatibility Antigens	Howard, J.	Inst. of Animal Physiology Cambridge, United Kingdom	$ 15,217
RO1AI14148-03	Mechanisms of Resistance to Bacterial Infection	Johnston, R.	Natl. Jewish Hosp. Res. Ctr. Denver, CO	$ 16,005
RO1AI15682	Radioimmunoassays for Diagnosis of Severe Candidiasis (Mice)	Jones, J.	Veterans' Admin. Hosp. Madison, WI	$ 11,434
RO1AI12146	Effects of Immunity on Intracellular Parasitism	Jones, T.	Cornell University Ithaca, NY	$ 15,946
PO1AI08724-24	Biology of Streptocci Sub-Streptolysin O in Streptococcal Infections - Acute Rheumatic Fever (Rabbits, Human)	Kaplan, E.	University of Minnesota Minneapolis, MN	$ 10,866
RO1AI07826-11	Studies on In Vivo Growth of Staphylococci (Mice, Rabbits)	Kapral, F.	Ohio State University Columbus, OH	$ 15,899
RO1AI03260	Biochemical Basis of Phagocytosis	Karnovsky, M.	Harvard University Boston, MA	$ 15,169

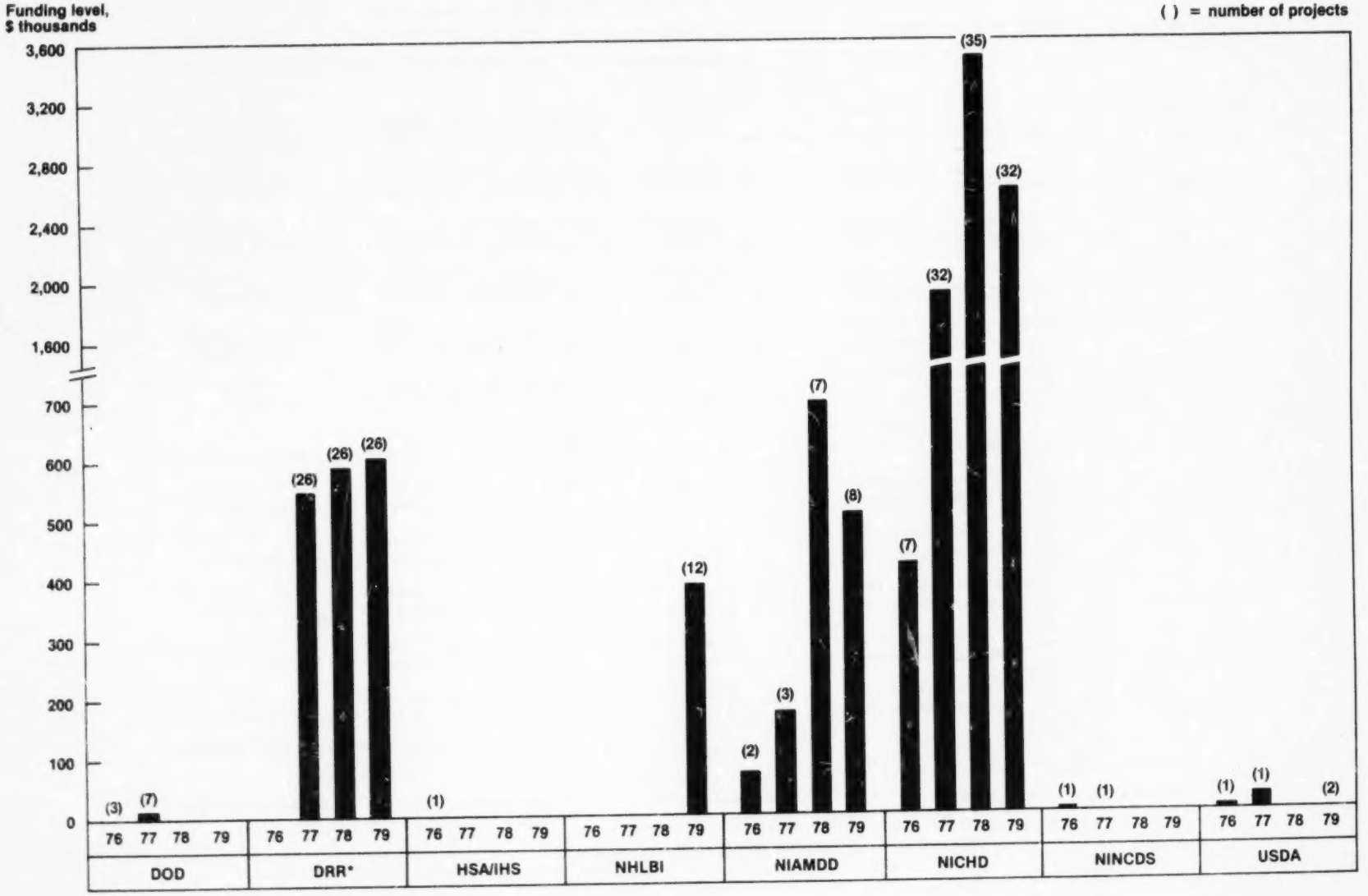
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AI07763	Antimicrobial Effect of Peroxidase in Leukocytes	Klebanoff, S.	University of Washington Seattle, WA	$ 17,522
RO1AI14209	Cryptococcal Polysaccharide - Inhibition of Phagocytosis	Kozel, T.	University of Nevada Reno, NV	$ 5,914
RO1AI11610	Isolation of a Skin Test Antigen for Blastomycosis	Larsh, H.	Univ. of Oklahoma Norman, OK	$ 6,702
PO1AI16252-01	CCU-MRU, A Multi-Disciplinary Mycolgy Research Unit	Lehrer, R.	University of California Los Angeles, CA	$ 7,606
RO1AI09504	Mechanisms of Leukocyte Bactericidal Activity	Mandell, G.	University of Virginia Charlottesville, VA	$ 14,407
RO1AI10622-08	Studies on Pathogenic Fungi (Mice, Human)	Medoff, G,	Washington U. Sch. of Med. St. Louis, MO	$ 7,506
PO1AI16228-01	Medical Mycology	Medoff, G.	Washington U. Sch. of Med. St. Louis, MO	$ 6,662
RO1AI15461-01	Immune Responses in Murine Cryptococcosis	Moser, S.	Tulane University New Orleans, LA	$ 14,200
RO1AI11942-06	Biochemical Cytology of Trichomonas Vaginalis	Muller, M.	Rockefeller University New York, NY	$ 17,329
RO1AI09116-11	Tissue Enzymes and Plasma Proteins (Animals, Human, Bacteria)	Najjar, V.	Tufts University Boston, MA	$ 32,670
RO1AI06931-14	Host Reactions to Microorganisms in Chronic Disease (Human)	Quie, P.	University of Minnesota Minneapolis, MN	$ 22,108
RO1AI08821	Studies of Opsonins in Phagocytosis	Quie, P.	University of Minnesota Minneapolis, MN	$ 21,258
RO1AI13251-04	Human Phagocyte Function in Health and Disease (Human)	Root, R.	Yale University New Haven, CT	$ 23,970
PO1AI05877	Reactions and Metabolism of Immune Proteins and Cells	Rosen, F.	Childrens' Hospital Boston, MA	$ 62,862
RO1AI10018-06	Ecology of Extrachromosomal Antibiotic Resistance	Schaefler, S.	Public Hlth. Res. Inst. New York, NY	$ 2,876

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AI02430	Metabolic Aspects of Bacterial Ecology in Host Tissue	Spritznagel, J.	Univ. of North Carolina Chapel Hill, NC	$ 18,084
RO1AI09366-09	Enterobacterial Adherence to the Vaginal Mucosa (Human)	Stamey, T.	Stanford University Stanford, CA	$ 9,417
RO1AI13004-04	Study of Neutrophil Metabolism and Function (Human)	Tsan, Min-Fu	Johns Hopkins University Baltimore, MD	$ 12,609
RO1AI03638-18	Bacteriology and Serology of Pyelonephritis (Human)	Vosti, K.	Stanford U. Sch. of Med. Stanford, CA	$ 5,960
PO1AI08724-24	Biology of Streptocci Sub-Streptococcal Phages	Wannamaker, L.	University of Minnesota Minneapolis, MN	$ 10,866
RO1AI09527-15	Epidemiology of Streptococcal Infections (Children)	Wannamaker, L.	University of Minnesota Minneapolis, MN	$ 10,841
RO1AI06487	Streptococcal Pyrogenic Exotoxins - Host Interactions	Watson, D.	University of Minnesota Minneapolis, MN	$ 8,209
RO1AI11271	Study of Host-Microbial Factors in Bacillemia	Young, L.	University of California Los Angeles, CA	$ 4,602
P50AI15332-02	Interdisciplinary Research Center in Immunologic Diseases. Sub-Immune Response to Opportunistic Pathogens (Human)	Young, L.	University of California Los Angeles, CA	$ 7,602
RO1AI13518-03	Immunobiology of K Antigens of Enterobacteriaceae (Rabbits)	Young, L.	University of California Los Angeles, CA	$ 13,597
National Institute of Arthritis, Metabolism, and Digestive Diseases				
RO1AM25644-01	Study of Anaerobic Infections in Diabetic Patients	Hoppes, W. L.	Northeastern Ohio Univ. Rootstown, OH	$ 37,401
RO1AM21137-03	Role of Suppressor T Cells in Pancreatic Disease	Sharp, J. G.	Nebraska U. Med. Sch. Lincoln, NE	$ 59,832

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Veterans' Administration				
53740536-7	Management of Urinary Incontinence	Andersen, B.	VAMC Lake Side, IL	*
52842948-3	Antibody Response to Polyvalent Pneumococcal Polysaccharide Vaccine to Patients with Diabetes Mellitus	Beam, T.	VAMC Buffalo, NY	*
67842791-4	A Comparison of the Reactivity to Coccidioides Immitis Skin Tests Between Subjects with Diabetes Mellitus and Subjects Without Diabetes	Campbell, S.	VAMC Tucson, AZ	*
68932666-1	Origin and Significance of Mycobacterium Xenopi in Clinical Specimens	Hawkins, J.	VAMC W. Haven, CT	*
50139752-8	Influenza Vaccine Evaluation in Chronic Disease Patients	Law, D.	VAMC Albuquerque, NM	*
53341411-35	Study of Efficacy of Betadine Ointment in Treatment of Infected Diabetic Leg and Foot Neurotrophic Ulcers and Decubitus and Stasis Ulcers	Lee, B.	VAMC Castle Point, NY	*
40240258-1	Studies on Staphylococcal Infections	Wise, R.	VAMC Togus, ME	*

* Funding information not available.

Pregnancy and Perinatal Problems (B18)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Heart, Lung, and Blood Institute				
NO1HR62951-06	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Bauer, C.	University of Miami Miami, FL	$ 8,155
NO1HR62951-08	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Bauer, C.	University of Miami Miami, FL	$ 48,550
P50HL19185-03	Pulmonary SCOR: Neonatal Respiratory Distress Syndromes	Clements, J. A.	University of California San Francisco, CA	$ 139,798
NO1HR62950-06	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Depp, R.	Northwestern University Evanston, IL	$ 7,123
NO1HR62950-07	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Depp, R.	Northwestern University Evanston, IL	$ 31,829
NO1HR62950-08	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Depp, R.	Northwestern University Evanston, IL	$ 10,610
RO1HL23602-02	Physiology of Renin, Aldosterone and Prostaglandin	Ferris, T. F.	University of Minnesota Minneapolis, MN	$ 38,667
NO1HR62948-05	Coordinating CTR for RDS Steroid Therapy Trial	Poole, K. W.	Research Triangle Inst. NC	$ 8,682
NO1HR62948-06	Coordinating CTR for RDS Steroid Therapy Trial	Poole, K. W.	Research Triangle Inst. NC	$ 25,960
NO1HR62949-06	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Rigatto, H.	University of Manitoba Manitoba, Canada	$ 7,664
NO1HR62949-07	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Rigatto, H.	University of Manitoba Manitoba, Canada	$ 42,120
NO1HR62949-09	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Rigatto, H.	University of Manitoba Manitoba, Canada	$ 11,070
National Institute of Arthritis, Metabolism, and Digestive Diseases				
RO1AM13518-17	Hypoglycemia in Small or Gestational Age Newborns	Baker, L.	J. Stokes Jr. Res. Inst. PA	$ 108,907
Z01AM69001-10	Complications and Outcome of Diabetic and Prediabetic Pregnancies	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 128,000

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO1AM21283-02	Body Composition in Neonates of Diabetic Mothers	Brans, Y. W.	Texas Univ. Med. School San Antonio, TX	$ 34,219
RO1AM21166-02	Perinatal Development in Offspring of Diabetic Mothers	Feigelson, M. H.	Roosevelt Hospital New York, NY	$ 86,871
RO1AM22105-01A1	Obesity and Diabetes in Pregnancy: Prospective Studies	Kalkhoff, R. K.	Med. Coll. of Wisconsin Milwaukee, WI	$ 84,568
RO1AM25610-02	Gestational Diabetes	Martin, R. J.	University of Georgia Athens, GA	$ 80,357
RO1AM25603-02	Developmental Changes in Infants of Diabetic Mothers	Schwartz, H. C.	Stanford Univ. Med. School Stanford, CA	$ 79,978
RO1AM21235-03	Maternal Hyperglycemia and Neonatal Hepatic Function	Vinicor, F.	Indiana Univ. Med. School Indianapolis, IN	$ 29,459
National Institute of Child Health and Human Development				
RO11191101A1	Glucose Consumption and Heat Production of Fetal Brain	Abrams, R. M.	University of Florida Gainesville, FL	$ 81,850
RO10574008	Control of Fetal and Neonatal Glucose Metabolism	Adam, P. A.	Case Western Reserve Univ. Cleveland, OH	$ 99,223
PO10078116002	Studies in Fetal Carbohydrate Metabolism	Battaglia, F.	University of Colorado Denver, CO	$ 51,222
RO11225302	Experimental Diabetes in Pregnancy	Beck, R. B.	Univ. of South Carolina Columbia, SC	$ 23,609
RO11203302	Placental Glucose Transport	Bissonnette, J. M.	U. Oregon Hlth. Sci. Ctr. Portland, OR	$ 62,779
RO11142902	Fetal Lung Development in the Diabetic Pregnancy	Farrell, P. M.	University of Wisconsin Madison, WI	$ 88,086
RO11062203	Surfactant: Biochemical Development and Stabilization	Gluck, L.	University of California San Diego, CA	$ 101,167
RO11089003	CNS Acetylcholine: Hypoglycemia, Hypoxia, and Recovery	Gorell, J. M.	Wayne State University Detroit, MI	$ 59,519

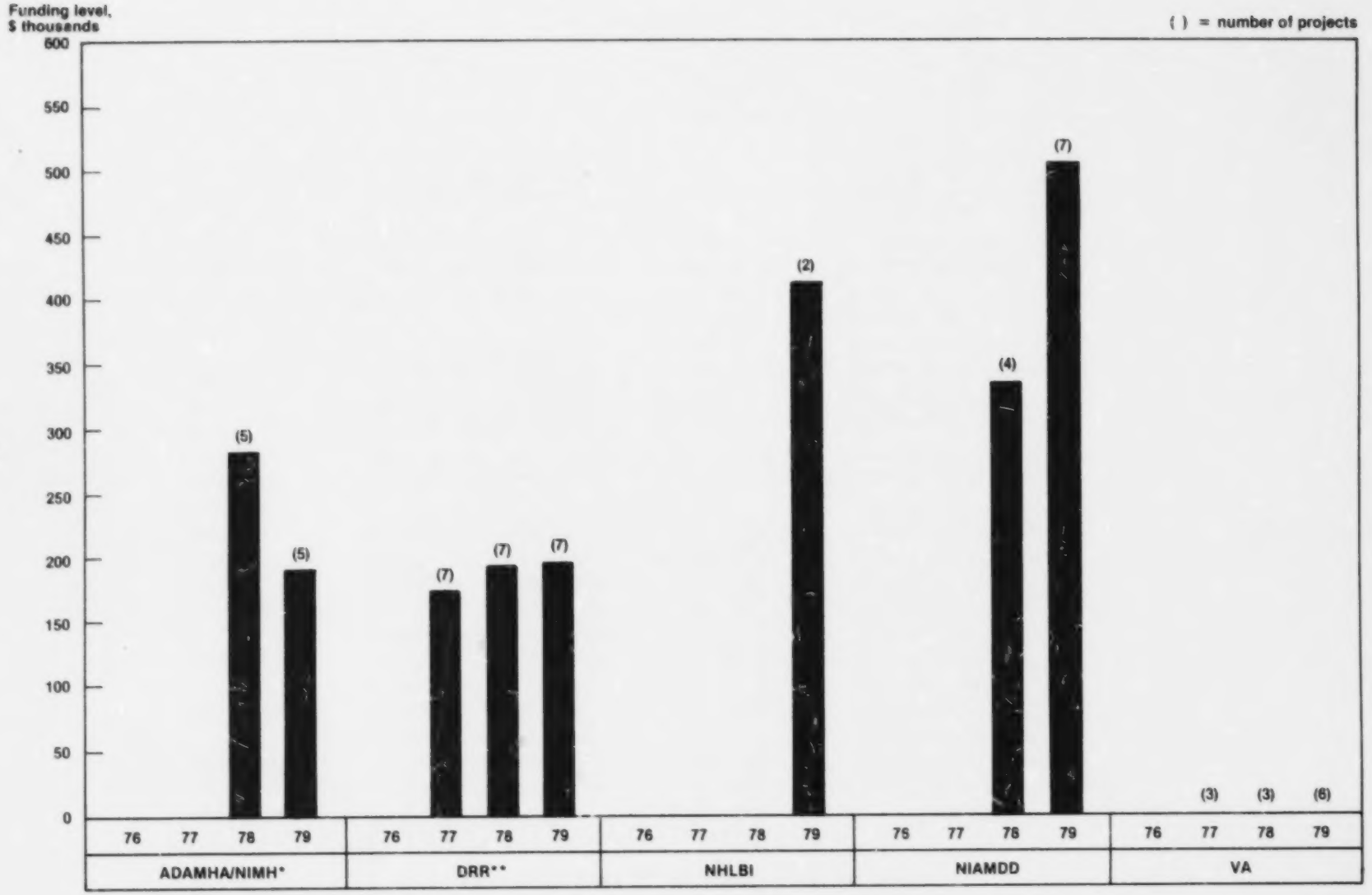
PREGNANCY AND PERINATAL PROBLEMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO10829306	Cellular Energy Metabolism During Fetal Development	Gross, I.	Yale University New Haven, CT	$ 128,457
RO10041222	Fetal Endocrinology and Diabetes	Hegre, C.	University of Minnesota Minneapolis, MN	$ 71,405
RO11346901	The High-Fiber Diet in Diabetic Pregnancies	Hollingsworth, D. R.	University of California San Diego, CA	$ 93,376
Z010008609	Developmental Enzymology	Huang, K. P.	NICHD, NIH Bethesda, MD	$ 292,334
RO11255901	Diabetes in Pregnancy	Huddleston, J. F.	University of Alabama Birmingham, AL	$ 64,211
RO11161402	Pathogenesis of Fetal Macrosomia in Maternal Diabetes	Kim, Y. S.	University of St. Louis St. Louis, MO	$ 41,271
RO11213802	Fetal Hypoxia-Streptozotocin Treated Rhesus Pregnancy	Kitzmiller, J. L.	Boston Hospital for Women Boston, MA	$ 38,677
PO111725020O5	Cardiovascular and Renal Function in Perinatal Lambs	Kleinman, L.	University of Cincinnati Cincinnati, OH	$ 79,529
PO111725020O1	Strict Control of Diabetes During Pregnancy	Knowles, H. C.	University of Cincinnati Cincinnati, OH	$ 79,529
P501134302009	Development of Offspring of Diabetic Mothers	Lipsett, L.	Brown University Providence, RI	$ 67,089
RO11251701	Pregnancy: Mechanism of Its Effect on Insulin Release	Lipson, L. G.	Univ. of Southern Calif. Los Angeles, CA	$ 61,580
RO10186614	Physiological Study of the Placenta	Meschia, G.	University of Colorado Denver, CO	$ 157,789
PO111725020O3	Cardiac Function in Fetuses of Diabetic Pregnancies	Meyer, R. A.	University of Cincinnati Cincinnati, OH	$ 79,529
RO11160302	Fetal Pancreatic Islet Development in Diabetic Mice	Nakane, P. K.	University of Colorado Denver, CO	$ 40,131
RO11264302	Effect of Maternal Diabetes on Metabolism in Newborns	Patel, M. S.	Case Western Reserve Univ. Cleveland, OH	$ 91,706
RO1115280IA1	Islet and Placenta Changes in Infants of Diabetic Women	Paulsen, E. P.	University of Virginia Charlottesville, VA	$ 9,925

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
RO11067004	Nutrition and Hormonal Interaction in Lung Development	Rhoades, R. A.	Indiana University Indianapolis, IN	$ 61,196
PO1172502002	Biochemical Indicators of Fetal Status	Seeds, A.	University of Cincinnati Cincinnati, OH	$ 79,529
P501134302010	Perceptual Development in Infants of Diabetic Mothers	Siqueland, E. R.	Brown University Providence, RI	$ 67,889
PO1172502004	Calcium and Vitamin D Metabolism in the Diabetic Pregnancy	Tsang, R. C.	University of Cincinnati Cincinnati, OH	$ 79,529
Z010012605	Developmental Biology	Ulane, R. E.	NICHD, NIH Bethesda, MD	$ 77,554
RO10910905	Pathogenesis of Perinatal Hypoglycemic Brain Damage	Vannucci, R. C.	Pennsylvania State Univ. Hershey, PA	$ 66,476
PO1172502006	Placental Insulin Receptors in Diabetes	Whittsett, J. A.	University of Cincinnati Cincinnati, OH	$ 79,529
N01HR62952-06	Evaluate Antenatal Steroid Therapy in Neonatal RDS	Zachman, R. D.	University of Wisconsin WI	$ 35,801
U. S. Department of Agriculture				
0078391	Fetal Growth and Survival Rate of Piglets from Streptozotocin - Diabetic Gilts	Ezekwe, M. O.	Virginia State University Blacksburg, VA	*
0001359	Biochemistry of Metabolic Disorders Associated with Parturition	Jackson, H. D.	Purdue University Lafayette, IN	*

* Funding information not available.

Psychosocial and Behavioral Problems (B 19)



*Funding data for two FY 1979 projects not available.

**DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Alcohol, Drug Abuse, and Mental Health Administration				
R01MH29822-03	Strategies of Coping with Illness Onset in Late Life	Felton, B. J.	New York University New York, NY	$ 44,840
KZ01MH002143	Psychosocial and Biomedical Interactions in Juvenile Diabetes	Hamburg, B. A.	NIMH, NIH Bethesda, MD	*
Z01MH002142	Behavioral Studies of Children with Juvenile Diabetes	Moss, H. A.	NIMH, NIH Bethesda, MD	*
R01MH32244-01	Family Mental Health Factors in Juvenile Diabetes	Rosman, B. L.	Phil. Child Guidance Clinic Philadelphia, PA	$ 83,106
R01MH29187-03	An Opponent-Process Theory of Acquired Motivation	Solomon, R. L.	University of Penn. Philadelphia, PA	$ 61,015
National Heart, Lung, and Blood Institute				
R01HL13454-09	Behavioral Stress and Cardiomyopathy	Corley, K. C., Jr.	Virginia Comwlth. Univ. Richmond, VA	$ 5,388
R01HL21906-02	Stanford Five City Multi-factor Risk Reduction Study	Farquhar, J. W.	Stanford University Stanford, CA	$ 406,137
National Institute of Arthritis, Metabolism and Digestive Diseases				
R01AM20844-01S1	Sexual Disorders Resulting from Diabetes	Abel, G. G.	Tenn. Univ. Med. Coll. Memphis, TN	$ 12,503
R01AM25630-02	Sexual Disorders Resulting from Diabetes	Abel, G. G.	Col. Univ. Col. Phys. Surg. New York, NY	$ 158,844
K08AM00621-01	Psychosocial Adjustments of Latency-Aged Diabetes: Determinants and Relationship to Control	Grey, M.	Yale University New Haven, CT	$ 33,713

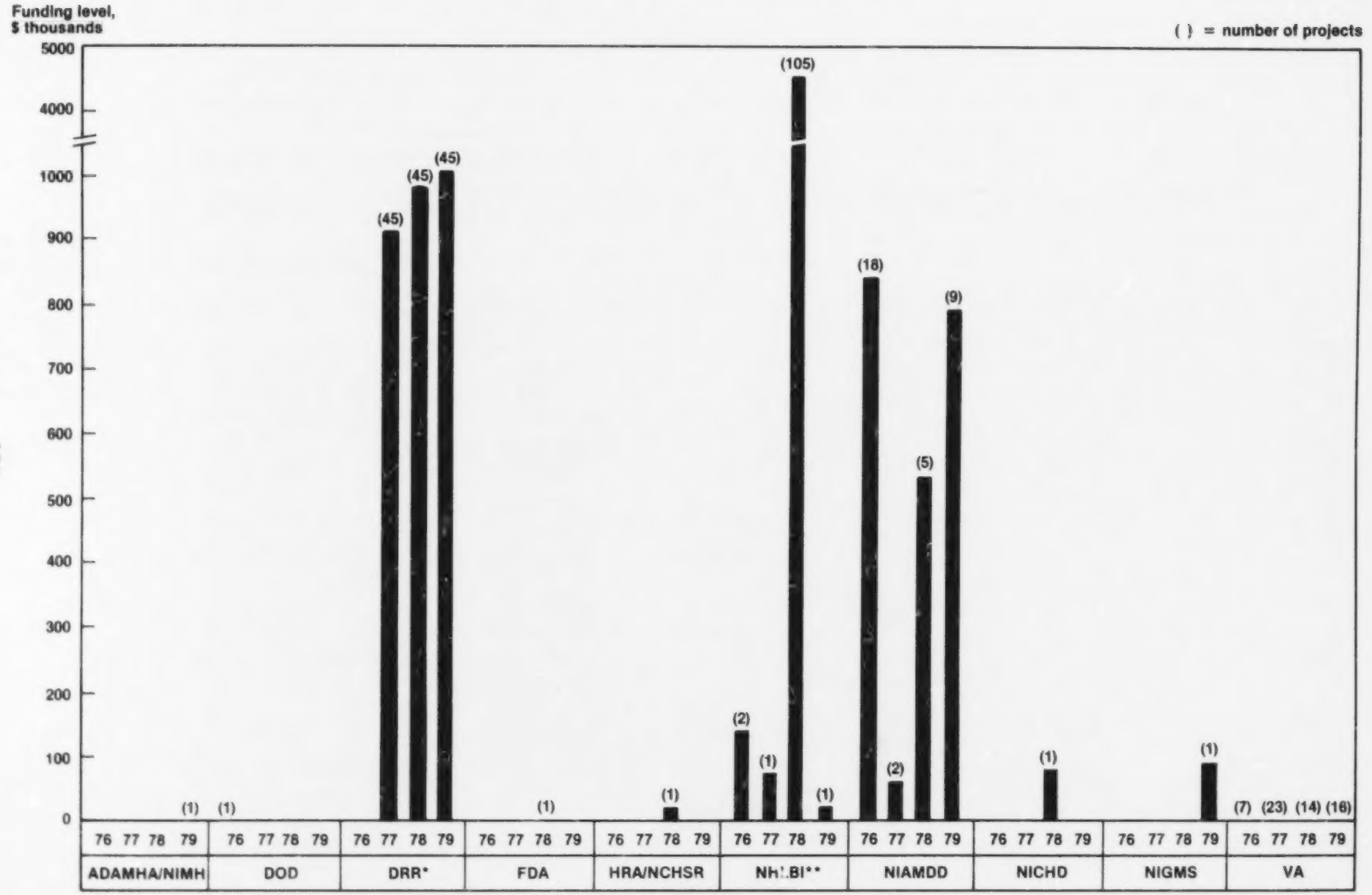
* Funding information not available.

PSYCHOSOCIAL AND BEHAVIORAL PROBLEMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM20754-03	The Pathogenesis of Impotence in Diabetes Mellitus	Halter, J. B.	Washington Univ. Med. Sch. Seattle, WA	$ 39,516
R01AM22182-02	Effect of Diabetes in the Male	Hamilton, D. W.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 67,495
R23AM26001-01	Project CID: Compliance Intervention for Diabetes	Harris, R. J.	Miami Univ. Med. Sch. Coral Gables, FL	$ 43,224
R01AM25568-01	Depression in Newly Diagnosed Juvenile Diabetics	Kovacs, M.	Pittsburgh U. Med. Sch. Pittsburgh, PA	$ 111,141
R01AM20845-03	Diabetes Mellitus and Sexual Dysfunction	Schiavi, R. C.	Mt. Sinai Med. Sch. New York, NY	$ 74,557
Veterans' Administration				
6893956-1	A Study of Factors Related to Levels of Compliance of Diabetics to a Therapeutic Regimen	Infante, M.	VAMC W. Haven, CT	*
69139789-8	Assignment of Factors Determining Compliance in Diabetes	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
54636382-5	Social Science Research Program	Linn, M.	VAMC Miami, FL	*
52940296-3	Determining the Language Characteristics of Pre-Stroke Diabetics	McCormick, G.	VAMC Butler, PA	*
64241918-28	NIMH-CRB Psychobiology Depression Program - Biology	Mendels, J.	VAMC Philadelphia, PA	
60742258-1	A Comparative Study on the Effects of Empathic Support on Self Concept and Noncompliance	Yearous, L.	VAMC Madison, WI	*

* Funding information not available.

Pharmacologic Agents (B 20)



*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only.
**NHLBI drops from 105 projects in FY 1978 to 1 in FY 1979 because of reclassification.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Alcohol, Drug Abuse, and Mental Health Administration				
R01AA003218	Alteration of Pancreatic Endocrine Function by Ethanol	Potter, D. E.	Texas Technical University Lubbock, TX	*
National Heart, Lung, and Blood Institute				
Z01HL02821-02	Effect of Diazepam (Valium) on the Development of Experimental Atherosclerosis	Patel, D. J.	NHLBI, NIH Bethesda, MD	$ 20,867
National Institute of Arthritis, Metabolism and Digestive Diseases				
Z01AM54013-05DD	Effect of Oral Contraceptives on Glucose Tolerance	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 0
R01AM21282-03	Mechanism of Action of Diabetes on Drug Metabolism	Cook, D. E.	Nebraska Univ. Med. Sch. Lincoln, NE	$ 46,312
R01AM23019-02	Properties of Skeletal Muscle in Alloxan Diabetes	Grossie, J. A.	Ohio St. Univ. Med. Sch. Columbus, OH	$ 27,278
R01AM25334-01	Hypoglycemic Action of 2-Chloropropionate	Harris, R. A.	Indiana Univ. Med. Sch. Indianapolis, IN	$ 52,956
R01AM20086-03	Membrane Photodamage Induced by Antidiabetic Drugs	Haynes, D. H.	Miami Univ. Med. Sch. Coral Gables, FL	$ 39,342
R01AM21260-03	Mode of Action of Diabetogenic Agents	Heikkila, R. E.	Mt. Sinai Med. Sch. New York, NY	$ 71,798
R01AM06876-17	The Relation of Treatment to Diabetic Complications	Knatterud, G. L.	Maryland Univ. Med. Sch. Baltimore, MD	$ 81,997
R01AM21202-02	Diabetogenic Effect of L-Asparaginase	Lavine, R. L.	Hahnemann Med. Coll. Philadelphia, PA	$ 82,074
R01AM09748-13	Diabetes--Pathogenesis, Detection, and Oral Agents	Soeldner, J. S.	Joslin Diabetes Fdn. Inc. Boston, MA	$ 393,430

* Funding information not available.

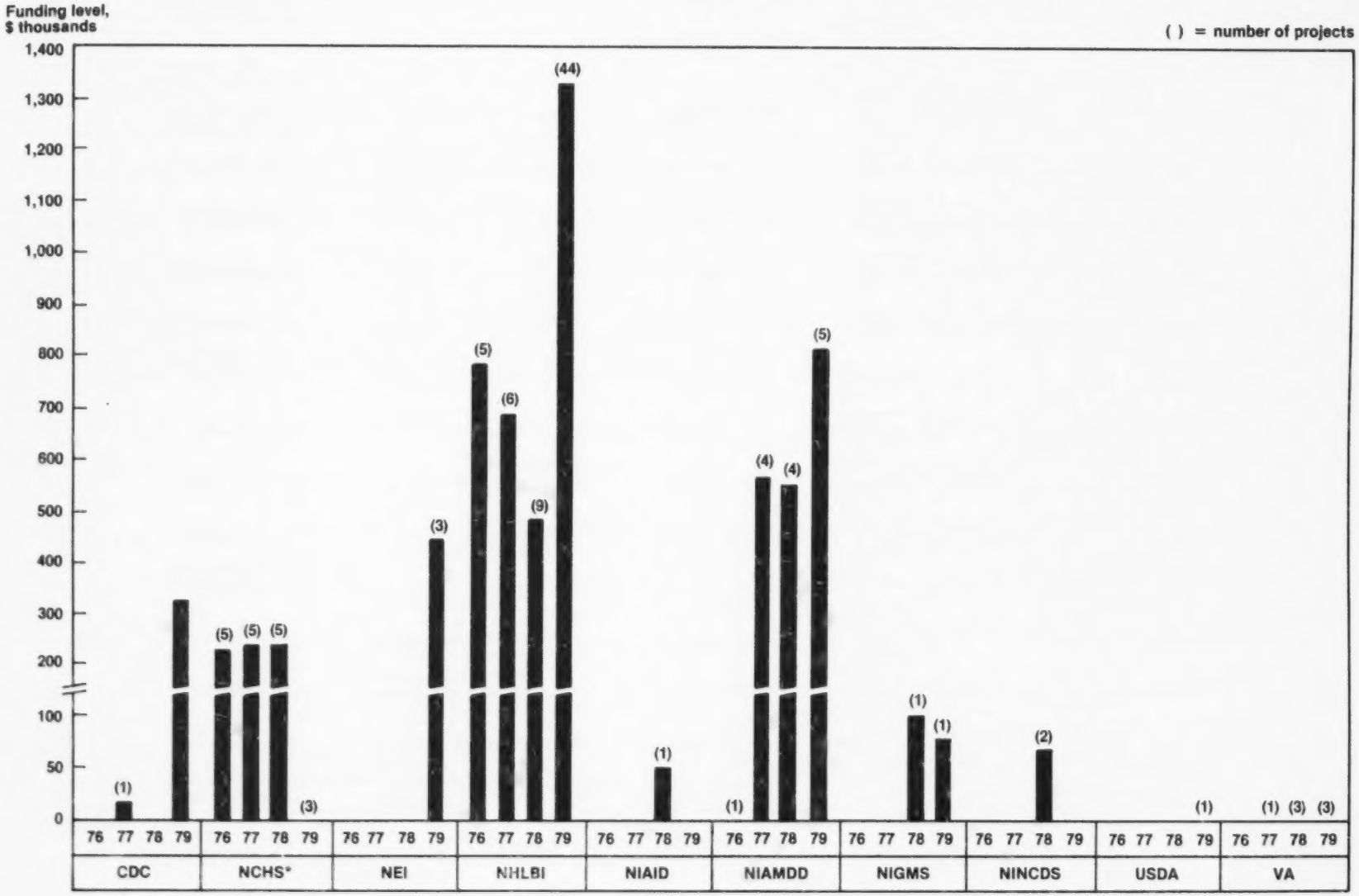
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of General Medical Sciences				
GM12675	Biochemical Toxicology and Pharmacology	Tephly, T. R.	University of Iowa Iowa City, IA	$ 89,110
Veterans' Administration				
53542699-5	The Use of Amino Acid Intravenous Infusion in Operative and Postoperative Management of Diabetics	Craig, R.	VAMC Lakeside, IL	*
67342300-4	Diabetes Treatment Study	Farese, R.	VAMC Tampa, FL	*
67138674-1	Effects of Halofenate Treatment on Glucose, Insulin, and Glucagon Metabolism	Friedberg, S.	VAMC San Antonio, TX	*
57840560-21	Use of Metoclopramide	Greenlee, H.	VAMC Hines Chicago, IL	*
69135881-3	Antigenicity of Single Component Beef Insulin	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
69139057-6	Low Dose Insulin Infusion in Diabetic Surgical Patients	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
69142662-12	Orinase R Using 24 Hour Urine Sugar and FBG As a Measure of Diabetic Control	Levin, S.	VAMC Wadsworth Los Angeles, CA	*
68940720-1	Therapeutic Efficacy of Metoclopramide in Gastric Stasis Syndromes	McCallum, R.	VAMC W. Haven, CT	*
69029608-4	Effects of Perhexiline	McCaughan, D.	VAMC W. Roxbury, MA	*

* Funding information not available.

PHARMACOLOGIC AGENTS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
60743110-2	The Influence of Diuretics on the Serum Lipids and Insulin Levels in Patients with Benign Essential Hypertension	Moorthy, A.	VAMC Madison, WI	*
57826041-2	Drug Interaction and Human Plasma Protein Binding	Oester, Y.	VAMC Hines Chicago, IL	*
60338621-4	Studying the Effects of Diazoxide During Routine Administration	Samols, E.	VAMC Louisville, KY	*
61443118-1	Determination of the Effect of Tetracycline Hydrochloride on Urine Glucose Test Using the Copper Reduction Method Clinitest (R)	Self, T.	VAMC Memphis, TN	*
54910223-2	Studies of the Insulin Secreting Properties of Various Agents	Seltzer, H.	VAMC Dallas, TX	*
54940214-6	Glipizide (K4024) Versus Tolazamide Open Study	Seltzer, H.	VAMC Dallas, TX	*
54943660-11	An Open Study To Determine the Safety and Efficacy of One-a-Day Dosing	Seltzer, H.	VAMC Dallas, TX	*

* Funding information not available.



*FY 1977 values have been changed from those in fourth annual report to correct for previous nonreporting.

EPIDEMIOLOGY

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Center for Health Statistics				
	Health Interview Survey	Drury, T.	NCHS Hyattsville, MD	*
	Health and Nutrition Examination Survey	Murphy, R.S.	NCHS Hyattsville, MD	*
	Mortality Statistics	Rosenberg, H.	NCHS Hyattsville, MD	*
National Eye Institute				
R01EY03083-01	Epidemiological Study of Diabetic Retinopathy	Klein, R.	Univ. of Wisconsin Madison, WI	$ 143,991
R01EY03187-01	Retinal/Renal Capillary Leakage in Childhood Diabetes	Paulsen, E. P.	University of Virginia Charlottesville, VA	$ 113,655
R01EY02636-02	Case Control Study of Diabetic Retinopathy	Rand, L. I.	Joslin Diabetes Foundation Boston, MA	$ 193,916
National Heart, Lung, and Blood Institute				
P50HL15103-08	A/S SCOR--Early Natural History Arteriosclerosis	Berenson, G. S.	Louisiana St. U. Med. Sch. New Orleans, LA	$ 56,604
N01HV22976-09	Multiple Risk Factor Intervention Trial	Blackburn, H. W.	Univ. of Minnesota Minneapolis, MN	$ 6,926
N01HV22977-10	Multiple Risk Factor Intervention Trial	Borhani, N. O.	Univ. of California Davis, CA	$ 27,727
N01HV22977-11	Multiple Risk Factor Intervention Trial	Borhani, N. O.	Univ. of California Davis, CA	$ 29,386
N01HV92929-00	Twin Study Follow-Up Examination	Borhani, N. O.	Univ. of California Davis, CA	$ 2,626

* Indicates part of a larger project.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV92931-00	Twin Study Follow-Up Examination	Chesney, M. A.	SRI International CA	$ 2,260
N01HV42933-10	Multiple Risk Factor Intervention Trial	Christakis, G.	Dade Co. Dept. Pub. Hlth. Dade County, FL	$ 21,875
N01HV42933-11	Multiple Risk Factor Intervention Trial	Christakis, G.	Dade Co. Dept. Pub. Hlth. Dade County, FL	$ 20,561
N01HV92928-00	Twin Study Follow-Up Examination	Christian, J. E.	Indiana Univ.-Purdue Univ. Indianapolis, IN	$ 4,609
N01HV22979-10	Multiple Risk Factor Intervention Trial	Dalen, J. E.	Harvard University Cambridge, MA	$ 24,630
N01HV33106-07	Multiple Risk Factor Intervention Trial	Dawber, T. R.	Boston University Boston, MA	$ 22,242
N01HV33106-08	Multiple Risk Factor Intervention Trial	Dawber, T. R.	Boston University Boston, MA	$ 26,431
N01HV52971-12	Reexamination of Framingham Heart Study Cohort	Dawber, T. R.	Boston University Boston, MA	$ 12,000
N01HV52971-11	Reexamination of Framingham Heart Study Cohort	Dawber, T. R.	Boston University Boston, MA	$ 382
N01HV92922-00	Framingham Cohort Surveillance and Offspring Study	Dawber, T. R.	Boston University Boston, MA	$ 23,180
N01HV42902-09	Epidemiological Studies of Coronary Heart Disease	Garcia-Palmieri, M. R.	Univ. of Puerto Rico San Juan, PR	$ 11,746
N01HV42932-06	Multiple Risk Factor Intervention Trial	Giese, W. K.	Univ. of South Carolina Columbia, SC	$ 23,303
N01HV33110-06	Multiple Risk Factor Intervention Trial	Holmes, W. L.	Lankenau Hospital Philadelphia, PA	$ 1,746
N01HV53010-05	NAS-NRC Twin Registry	Hrubec, Z.	Natl. Academy of Sciences Washington, DC	$ 527
N01HV53010-04	NAS-NRC Twin Registry	Hrubec, Z.	Natl. Academy of Sciences Washington, DC	$ 4,683

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV22981-15	Multiple Risk Factor Intervention Trial	Hulley, S. B.	Institutes of Medical Sci. CA	$ 2,448
N01HV33108-07	Multiple Risk Factor Intervention Trial	Kezdi, P.	Wright State University Fairborn, OH	$ 24,609
N01HV22971-10	MRFIT Coordinating Center	Kjelsberg, M.	University of Minnesota Minneapolis, MN	$ 59,829
N01HV33109-08	Multiple Risk Factor Intervention Trial	Kuller, L. H.	Univ. of Pittsburgh Pittsburgh, PA	$ 3,222
N01HV33104-12	Multiple Risk Factor Intervention Trial	Lasser, N. L.	Coll. Med. and Dent., N.J. Newark, NJ	$ 32,102
Z01HL02812-10	Animal Models for Study of Atherosclerosis	Mahley, R. W.	NHLBI, NIH Bethesda, MD	$ 31,734
N01HV42931-08	Multiple Risk Factor Intervention Trial	Marmorston, J.	Univ. of Southern Calif. San Diego, CA	$ 25,679
N01HV42911-08	ECG Center for MRFIT	Rautaharju, P. M.	Dalhousie University Halifax, Canada	$ 10,797
N01HV33107-10	Multiple Risk Factor Intervention Trial	Schnaper, H. W.	Univ. of Alabama University, AL	$ 27,970
N01HV22980-07	Multiple Risk Factor Intervention Trial	Sherwin, R. W.	Univ. of Maryland College Park, MD	$ 21,436
N01HV22980-08	Multiple Risk Factor Intervention Trial	Sherwin, R. W.	Univ. of Maryland College Park, MD	$ 24,690
R01HL21010-03	Glycemia, Other Traits and CV Death in 40,000 Persons	Stamler, J.	N'western U. Sch. of Med. Evanston, IL	$ 144,780
N01HV22978-16	Multiple Risk Factor Intervention Trial	Stamler, J.	N'western U. Sch. of Med. Evanston, IL	$ 40,434
N01HV62955-10	Data Collection in Clinical Pathology and Morbid Anatomy	Stemmermann, G. N.	Kuakini Medical Center HI	$ 535
N01HV62955-05	Data Collection in Clinical Pathology and Morbid Anatomy	Stemmermann, G. N.	Kuakini Medical Center HI	$ 864
N01HV62955-08	Data Collection in Clinical Pathology and Morbid Anatomy	Stemmermann, G. N.	Kuakini Medical Center HI	$ 2,524

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
N01HV62955-09	Data Collection in Clinical Pathology and Morbid Anatomy	Stemmermann, G. N.	Kuakini Medical Center HI	$ 15,298
R01HL24799-01	Diabetes and Cardiovascular Risk in Mexican Americans	Stern, M. P.	Univ. Texas Hlth. Sci. Ctr. San Antonio, TX	$ 217,475
P01HL08974-15	Natural and Experimental Atherosclerosis	Strong, J. P.	La. State Univ. Med. Ctr. New Orleans, LA	$ 53,680
Y01HV40016-06	Standardization Laboratory for MRFIT	Watson, W. C.	Center for Disease Control Atlanta, GA	$ 3,300
R01HL21039-03	Vascular Lesions of Diabetes in Oklahoma Indians	West, K. M.	Oklahoma Hlth. Sci. Ctr. Oklahoma City, OK	$ 78,912
N01HV33101-08	Central Laboratory MRFIT	Widdowson, G.	Inst. of Medical Science CA	$ 34,501
N01HV33101-09	Central Laboratory MRFIT	Widdowson, G.	Inst. of Medical Science CA	$ 74,316
N01HV33105-14	Multiple Risk Factor Intervention Trial	Wild, J.	Kaiser Fdn. Res. Inst. CA	$ 39,982
National Institute of Arthritis, Metabolism, and Digestive Diseases				
Z01AM69000-14EFS	Diabetes Mellitus in the Gila River Indian Community	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 698,000
Z01AM69006-09EFS	Gila River Indian Community Autopsy Study	Bennett, P. H.	NIAMDD, NIH Bethesda, MD	$ 20,000
R01AM20733-02	Epidemiology of Diabetes Among "New Immigrant Yemenites"	Cohen, A. M.	Hebrew Univ. Med. Sch. Jerusalem, Israel	$ 51,744
R01AM24021-02	Juvenile Diabetes Mellitus: Epidemiology and Etiology	Drash, A. L.	Childrens Hospital Pittsburgh, PA	$ 102,732
	National Diabetes Data Group	Harris, M. I.	NIAMDD, NIH Bethesda, MD	*

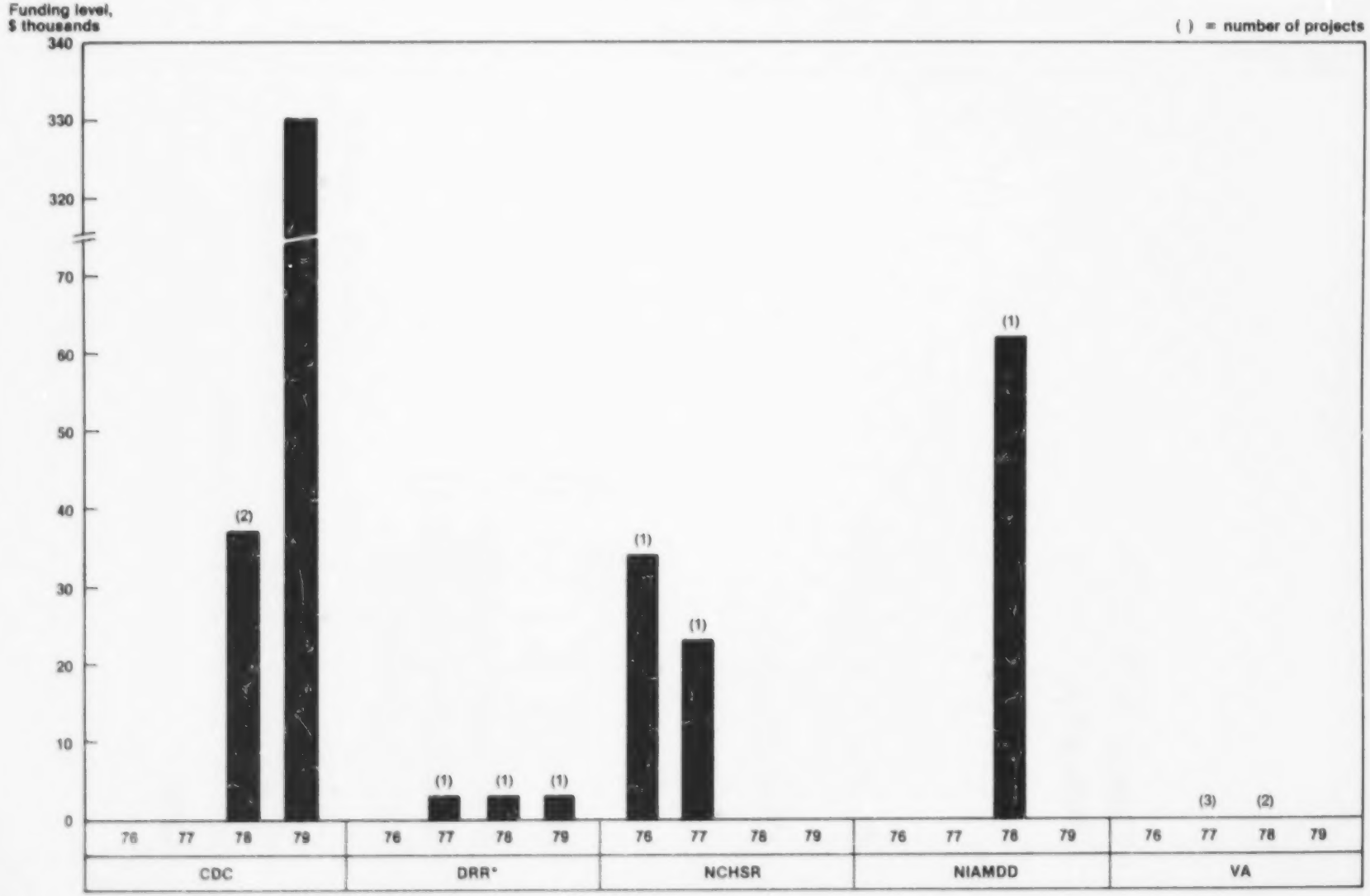
* Indicates part of a larger project.

EPIDEMIOLOGY (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
R01AM23090-01	Risk Factors in Glucose Intolerance	Modan, M.	Chaim Sheba Med. Ctr. Israel	$ 217,550
R01AM21462-02	Causes of Diabetes and Obesity in Oklahoma Indians	West, K. M.	Oklahoma Univ. Med. Sch. Oklahoma City, OK	$ 97,994
R01AM25446-01	Diabetes in the Pacific-Genetic-Environment Interactions	Zimmet, P. Z.	Melbourne Univ. Melbourne, Australia	$ 149,247
National Institute of General Medical Sciences				
GM14231	Natural History of Heart, Cancer, and Stroke	Kurland, L. T.	Mayo Foundation Rochester, MN	$ 77,014
U.S. Department of Agriculture				
0069491	Basic Human Needs in Rural Development: Food/Nutrition	Koh, E.	Alcorn A and M Lorman, MS	*
Veterans' Administration				
58343081-2	Diabetes Intervention Study	Vinicor, F.	VAMC Indianapolis, IN	*

* Funding information not available.

Health Services (B 22)



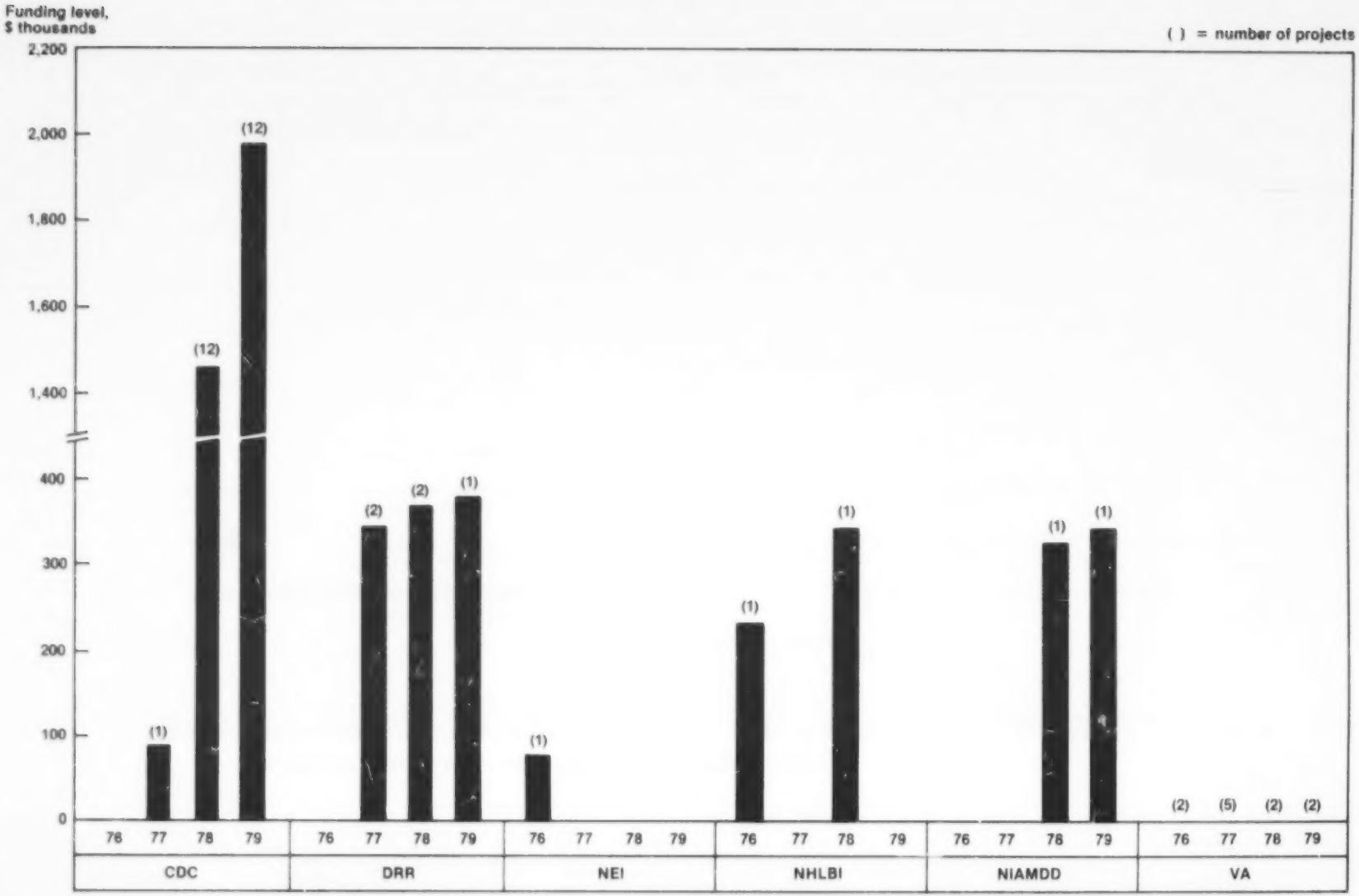
*DRR data provided for FY 1977 (actual), FY 1978 (estimated), and FY 1979 (estimated) only

HEALTH SERVICES

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Center for Health Services Research				
HS02591	A Group Management Program for Diabetes Mellitus	Cohen, R. Y.	Florida State University Tallahassee, FL	$ 0
HS02863	Parents of Juvenile Diabetes and Medical Compliance	Johnson, K. W.	University of Notre Dame Notre Dame, IN	$ 0
Veterans' Administration				
53740677-5	Development, Implementation and Evaluation of a Teaching Package for Preoperative Patients	Duslak, J.	VAMC West Side Chicago, IL	*
69142661-11	A Study of Measures Regarding Diabetic Patient Education	Levin, S.	VAMC Wadsworth Los Angeles, CA	*

* Funding information not available.

Health Care Delivery (C 1-8)



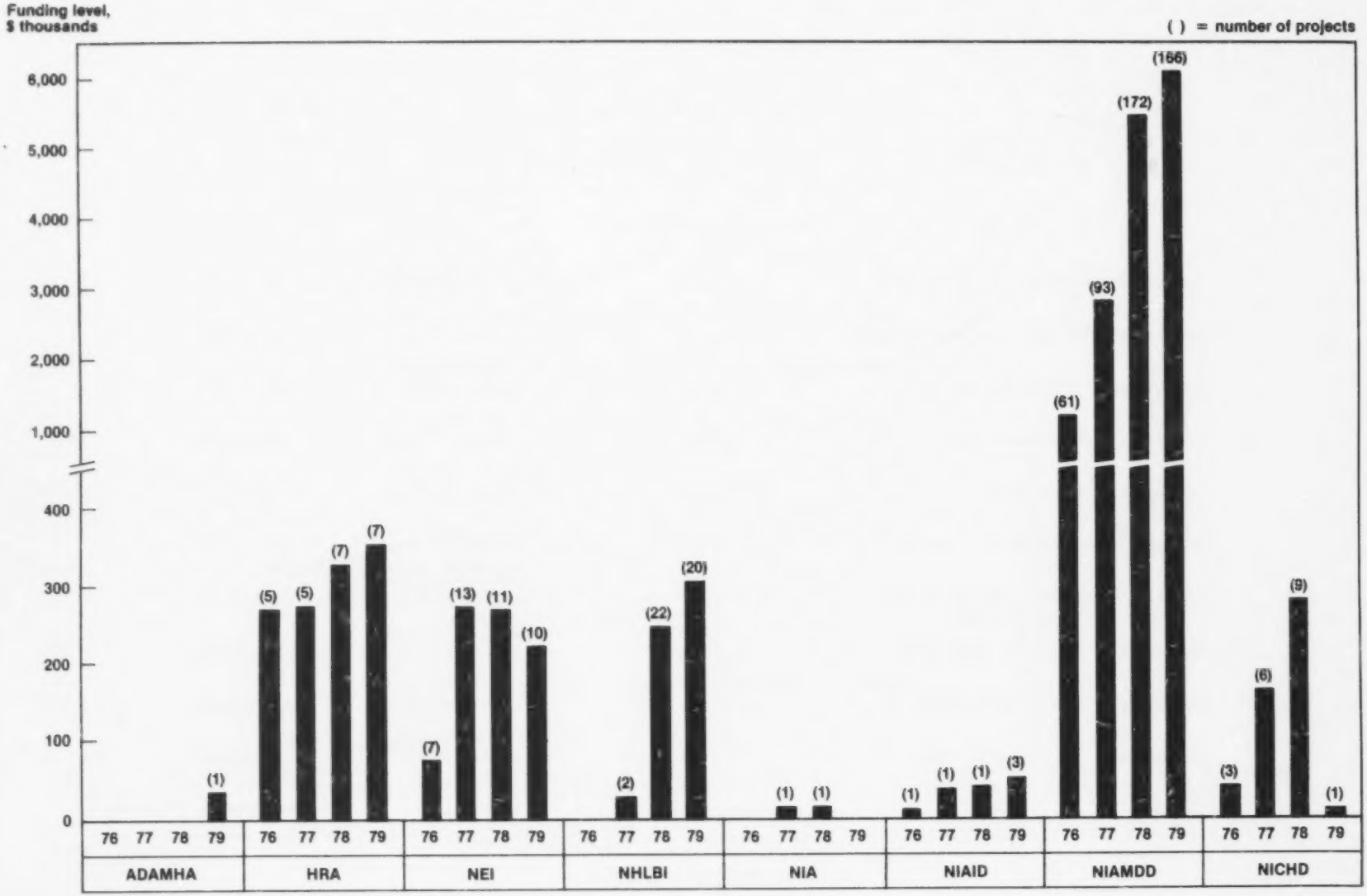
HEALTH CARE DELIVERY

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
		PUBLIC EDUCATION		
National Institute of Arthritis, Metabolism, and Digestive Diseases				
#01AM02221	National Diabetes Information Clearinghouse	Pyke, H.	CSR Inc. Washington, DC	$ 339,723
		HEALTH CARE SERVICES		
National Center for Health Statistics				
	Hospital Discharge Survey	Bacon, E. E.	NCHS Hyattsville, MD	*
	National Ambulatory Medical Care Survey	Delozier, J. E.	NCHS Hyattsville, MD	*
	National Nursing Home Survey	Van Nostrand, J. F.	NCHS Hyattsville, MD	*
		HEALTH CARE FINANCING		
National Center for Health Statistics				
	National Medical Care Expenditure Survey	Wright, R.	NCHS Hyattsville, MD	*
		HEALTH CARE DELIVERY AND RESEARCH		
Center for Disease Control				
200-77-0760	Diabetes Control Demonstration Project	Blakey, D.	Miss. St. Board of Health MS	$ 161,955
200-77-0762	Diabetes Control Demonstration Project	Campbell, J.D.	Nebraska Dept. Health NE	$ 211,070

* Indicates part of a larger project.

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
200-77-0753	Diabetes Control Demonstration Project	Cannon, J.	R.I. Dept. of Health RI	$ 180,925
200-77-0755	Diabetes Control Demonstration Project	Dyson, B.	Ill. Dept. Public Health IL	$ 198,097
200-77-0719	Diabetes Control Demonstration Project	Ferguson, S.	Colorado Dept. of Health CO	$ 258,691
200-77-0762	Diabetes Control Demonstration Project	Isbister, J.	Mich. Dept. Public Health MI	$ 251,134
200-79-0905	Diabetes Control Demonstration Project	Leahy, R.	Wash. Dept. Soc./Hlth. Srvs. WA	$ 170,022
200-77-0759	Diabetes Control Demonstration Project	McCallum, D.	S.C. Dept. Hlth./Env. Cntl. SC	$ 269,212
200-77-0761	Diabetes Control Demonstration Project	McGinty, F.	Maine Dept. of Human Srvs. ME	$ 243,072
200-77-0754	Diabetes Control Demonstration Project	Rothenberg, R.	N.Y. State Dept. Health NY	$ 316,086
200-79-0957	Diabetes Control Demonstration Project	Vaeth, M.	Ohio Dept. of Health OH	$ 195,789
200-77-0757	Diabetes Control Demonstration Project	Wilber, J.	Ga. Dept. Human Resources GA	$ 188,179

Manpower Development (D 1-3)



PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Eye Institute				
K04EY00034-05	Lens Metabolism and Cataract Formation	Chylack, Leo T., Jr.	Harvard University Boston, MA	$ 38,945
KO7EY00136-01	Blood-Ocular Barriers under Stress--Exper. Diabetes	Klein, R.	University of Wisconsin Madison, WI	$ 35,000
K04EY00184-02	Blood Flow and Transcapillary Exchange in Eye Fundus	Riva, C. E.	University of Pennsylvania Philadelphia, PA	$ 39,229
KO4EY00135-01	Blood-Retinal Barrier in Diabetic Retinopathy	Wallow, I. H.	University of Wisconsin Madison, WI	$ 38,980
National Heart, Lung, and Blood Institute				
K01AM00589-02	Serca-Diabetes Mellitus: Cardiovascular	Brownlee, M. A.	Rockefeller University New York, NY	$ 42,314
K01AM00592-02	Serca-Diabetes Mellitus: Cardiovascular	Chait, A.	University of Washington Seattle, WA	$ 47,520
K04HL00426-02	Cholesterol Metabolism and Atherosclerosis	Fogelman, A. M.	University of California Los Angeles, CA	$ 7,970
K01AM00590-02	Serca-Diabetes Mellitus: Cardiovascular	Jones, R. L.	Rockefeller University New York, NY	$ 38,891
K04HL00481-02	Cholesterol in Erythrocyte Membranes	Lange, Y.	Boston University Boston, MA	$ 7,646
K01AM00591-02	Serca-Diabetes Mellitus: Cardiovascular	Lopes-Virella, M. F.	Med. U. of South Carolina Columbia, SC	$ 46,491
K01AM00738-01	Serca-Diabetes Mellitus: Cardiovascular	Pfeifer, M. A.	University of Washington Seattle, WA	$ 43,049
K04HL00482-02	Regulation of Development and Cholesterol Synthesis	Shapiro, D. J.	University of Illinois Urbana-Champaign, IL	$ 6,434
National Institute of Allergy and Infectious Diseases				
K04AI00155	Regulation of the Cellular Events in Transplant Immunity	Strom, T.	Harvard University Boston, MA	$ 38,945

CAREER AWARDS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Arthritis, Metabolism, and Digestive Diseases				
KO4AM00366-02	Insulin Action in Liver Tissue and Adipose Tissue	Amatruda, J. M.	Rochester Univ. Med. Sch. Rochester, NY	$ 34,733
KO4AM70518-05	Cyclic Nucleotides as Mediators of Physiological Control	Appleman, M. M.	Univ. of South. California Los Angeles, CA	$ 36,288
KO4AM00584-02	Biogenesis of Membrane Phospholipids	Baetz, C. R.	Wisconsin Univ. Agri. Coll. Madison, WI	$ 35,771
KO4AM00428-02	Hormonal Regulation of Gluconeogenesis	Blair, J. B.	W. Virginia Univ. Med. Sch. Morgantown, WV	$ 36,610
KO4AM00174-03	Biosynthesis of Protein Hormones	Boime, I.	Washington Univ. Med. Sch. St. Louis, MO	$ 35,750
KO4AM00427-02	Hormonal Control of Protein Turnover	Bond, J. S.	Va. Cmnwlth. U. Med. Coll. Richmond, VA	$ 35,511
KO4AM00480-02	Gluconeogenesis and Glycogenolysis: Role and Regulation	Cherrington, A. D.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 38,326
KO8AM00620-03	Fuel and Amino Acid Metabolism in Primate Brain	Chideckel, E. W.	Boston Univ. Med. School Boston, MA	$ 42,660
KO4AM00155-04	Control of Energy Turnover in Skeletal Muscle	Connett, R. J.	Rochester Univ. Med. Sch. Rochester, NY	$ 29,634
KO4AM00477-02	Protein Phosphatase in Normal and Diabetic Liver	Curnow, R. T.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 36,288
KO4AM00249-04	Insulin Action on Fat Cell Metabolism	Czech, M. D.	Brown University Providence, RI	$ 40,928
KO4AM00187-04	Mechanisms of Insulin and Glucagon Degradation	Duckworth, W. C.	Tennessee Univ. Med. Coll. Memphis, TN	$ 37,011
KO1AM00593-02	Myocardial Function in Experimental Diabetes Mellitus	Fein, F. S.	A. Einstein Med. Coll. Bronx, NY	$ 42,753
KO1AM00633-01	Serca-Diabetes Mellitus: Cardiovascular	Feingold, K. R.	California Univ. Med. Sch. San Francisco, CA	$ 48,481

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
KO4AM00205-04	Hormonal Regulation of Hepatic Phosphodiesterase	Francis, S. H.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 27,337
KO4AM00652-01	Metabolic Adaptation to Starvation: An Animal Model	Goodman, M. N.	Boston Univ. Med. Sch. Boston, MA	$ 35,683
K04AM00293-03	Biochemical Studies of the Chondrodystrophies	Hollister, D. W.	Calif. Univ. Med. Sch. Los Angeles, CA	$ 41,148
KO4AM00721-04	Residual Beta-Cell Function in Diabetes Mellitus	Horwitz, D. L.	Chic. U. Pritzker Sch. Med. Chicago, IL	$ 37,623
KO4AM00397-02	Role of Insulin in Regulation of Fatty Acid Synthesis	Joshi, V. C.	Baylor College of Medicine Houston, TX	$ 38,311
KO4AM00316-03	Membrane-Limited Metabolism in Mammalian Red Cells	Kim, H. D.	Arizona Univ. Med. College Tucson, AR	$ 30,329
KO6AM02364-18	General Studies in Carbohydrates and Mineral Metabolism	Knowles, H. C., Jr.	Cincinnati Univ. Med. Coll. Cincinnati, OH	$ 32,239
KO4AM00178-04	Muscle Energy Metabolism	Kushmerick, M. J.	Harvard Univ. Med. School Boston, MA	$ 38,919
KO8AM00651-01	The Role of Hydrogen Peroxide in Insulin Action	May, J. M.	Va. Cmnwlth. U. Med. Coll. Richmond, VA	$ 40,770
KO4AM00256-03	Glycoprotein Structure and Metabolism in Diabetes	Meezan, E.	Arizona Univ. Med. Sch. Tucson, AR	$ 18,797
KO4AM00748-01	Plasma Membrane Receptors on Isolated A and B Cells	Merrell, R. C.	Stanford Univ. Med. Sch. Stanford, CA	$ 39,285
KO4AM00375-02	Diabetes and Reg. of Glycogen Met. in Liver and Heart	Miller, T. B., Jr.	Massachusetts U. Med. Sch. Amherst, MA	$ 34,236
KO1AM00561-02	Serca-Diabetes Mellitus: Cardiovascular	Misbin, R. I.	Florida Univ. Med. Coll. Gainesville, FL	$ 46,256
KO8AM00758-02	Effects of Insulin on Fetal Lung CHO Metabolism	Neufeld, N. D.	Cedars Sinai Med. Ctr. Los Angeles, CA	$ 52,920
KO4AM00038-05	Role of Intracellular Compartments in Nutrient Transport	Neville, M. C.	Colorado Univ. Med. Sch. Denver, CO	$ 36,558

CAREER AWARDS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
K04AM00528-02	Insulin and Immune Responses	Nichols, W. K.	Utah Univ. Pharm. Coll. Salt Lake City, UT	$ 32,385
K04AM00142-03	Role of Proglucagon in Glucagon Biosynthesis	Noe, B. D.	Emory Univ. Med. School Atlanta, GA	$ 34,630
K04AM00499-02	Electrophysiological Studies of Cultured Islet Cells	Pace, C. S.	Alabama Univ. Med. College Birmingham, AL	$ 32,400
K08AM00409-02	Muscle Amino Acid Metabolism and Hepatic Gluconeogenesis	Pardridge, W. M.	California Univ. Med. Sch. Los Angeles, CA	$ 18,113
K04AM00333-03	Studies of Insulin Biosynthesis	Permutt, M. A.	Washington Univ. Med. Sch. St. Louis, MO	$ 33,787
K04AM00183-06	Mechanisms of Polypeptide Hormone Action	Pohl, S. L.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 36,288
K04AM00363-03	Hypothalamic Control of Body Weight and Feeding	Powley, T. L.	Yale University New Haven, CT	$ 32,426
K04AM00552-02	Functions of Pancreatic Islet Cells Cultured In Vitro	Ravinovitch, A.	Miami Univ. Med. School Miami, FL	$ 37,205
K04AM00089-05	Carbohydrate Metabolism-Infection Interrelationships	Rayfield, E. J.	Mt. Sinai Med. Sch. New York, NY	$ 39,528
K08AM00401-03	Effects of Pancreatic Islet Transplantation in Rats	Reckard, C. R.	Chic. U. Pritzker Sch. Med. Chicago, IL	$ 42,660
K08AM00465-02	Glomerular B.M. Glycosyl-transferase	Reynerston, R. H.	Alabama Univ. Med. Coll. Birmingham, AL	$ 45,900
K08AM00648-01	Regulation of Glucose Homeostasis in Man	Rizza, R. A.	Mayo Foundation Rochester, MN	$ 40,408
K04AM00153-04	Heterogeneity of Plasma Hormones	Rogol, A. D.	Virginia Univ. Med. School Charlottesville, VA	$ 35,791
K04AM00190-04	Cyclic AMP and Protein Kinases in Cell Regulation	Rubin, C. S.	A. Einstein Med. College Bronx, NY	$ 38,678
K04AM00260-03	Counter Regulatory Hormones in Diabetic Ketoacidosis	Schade, D. S.	New Mexico Univ. Med. Sch. Albuquerque, NM	$ 36,453

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
KO4AM00318-03	Islet Transplantation in Diabetes Mellitus	Scharp, D. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 35,236
KO4AM00126-05	Smooth Muscle Proteins in Diabetic Vascular Disease	Scheinman, J. I.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 38,880
KO4AM00337-02	Regulation of the Glycogen Synthase System	Schlender, K. K.	Toledo Univ. Med. College Toledo, OH	$ 40,500
KO4AM00549-02	SV40 Transformed Endocrine Cells/SV40 Chromatin	Scott, W. A.	Miami Univ. Med. Sch. Miami, FL	$ 33,756
KO4AM00456-01A1	Microtubules and the Mechanism of Insulin Secretion	Sherline, P.	Connecticut Univ. Med. Sch. Farmington, CT	$ 39,204
KO4AM00334-03	Insulin, Glucagon, Somatostatin and Body Fuel Metabolism	Sherwin, R. S.	Yale Univ. Med. School New Haven, CT	$ 38,621
KO8AM00356-03	Glucagon and Insulin Receptors in Glucose Homeostasis	Soman, V. P.	Yale Univ. Med. School New Haven, CT	$ 43,119
KO4AM00161-05	Isolation and Transplantation of Pancreatic Islets	Sutherland, D. E. R.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 38,880
KO4AM00145-04	Biosynthesis and Secretion of Peptide Hormones	Tager, H. S.	Chic. U. Pritzker Sch. Med. Chicago, IL	$ 33,969
KO8AM00621-01	Effects of HGH and Open-Loop Insulin Delivery in Diabetes	Tamborlane, W. V., Jr.	Yale Univ. Med. School New Haven, CT	$ 43,713
KO1AM00564-02	Serca-Diabetes Mellitus: Cardiovascular	Thompson, D. A.	Rochester Univ. Med. Sch. Rochester, NY	$ 43,173
KO4AM00255-03	Studies of Glucagon and Somatostatin Secretion	Weir, G. C.	Va. Cmnwlth. Med. Coll. Richmond, VA	$ 35,064
KO4AM00757-02	Effect of Exercise and Aging on Endocrine Function	Winder, W. W.	S. Dakota Univ. Med. Sch. Vermillion, SD	$ 38,276

FELLOWSHIPS AND TRAINING PROGRAMS

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
Alcohol, Drug Abuse, and Mental Health Administration				
T31MH16056-01	Preventive Mental Health Training: High Risk Elderly	Mullins, K.	University of Tennessee Knoxville, TN	$ 35,708
National Eye Institute				
F32EY05412-01	Vasoproliferative Factor(s) in Diabetic Retionpathy	D'Amore, P. A.	Johns Hopkins University Baltimore, MD	$ 14,500
F32EY05305-02	Properties of Cells Isolated from Retinal Microvessels	Fratkin, J. D.	University of Iowa Iowa City, IA	$ 16,600
F32EY05352-01	Effects of Vitamin E on Ocular Angiopathy	Latker, C. H.	NEI, NIH Bethesda, MD	$ 11,000
T32EY07054-02	Training in Vision Research--Multidisciplinary	Leibowitz, H. M.	Boston University Boston, MA	$ 11,800
F32EY05250-02	Studies in Cataract Reversal	Mears, A. B.	Coll. Med./Dent. of NJ Newark, NJ	$ 13,400
T32EY07047-03	Visual Sciences--Multidisciplinary	Robinson, D. A.	Johns Hopkins University Baltimore, MD	$ 3,047
National Heart, Lung, and Blood Institute				
T32HL07312-02	Experimental Pathology of Cardiovascular Disease	Benditt, E. P.	University of Washington Seattle, WA	$ 14,636
F32HL05959-01	Role of Insulin and Diabetes Mellitus in HDL Metabolism	Biesbroeck, R. C.	University of Washington Seattle, WA	$ 15,200
F32HL05696-01X1	Structure Changes in Lipoproteins During Lipolysis	Brainard, J. R.	Baylor College of Medicine Houston, TX	$ 600
F32HL05730-02	Protein Lipid Interactions in the Microsomal Membrane	Crain, R. C.	Cornell University Ithaca, NY	$ 2,680
F32HL05693-01X1	Lipoprotein Lipase Stimulated Lipid Accumulation	De la Llera, M.	Med. Col. of Pennsylvania Philadelphia, PA	$ 600

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
T32HL07383-02	Plasma Lipoproteins and Apoproteins	Eder, H. A.	Yeshiva University New York, NY	$ 11,715
F32HL05807-02	Regulation of Intestinal Cholesterol Synthesis	Field, F. J.	Stanford University Stanford, CA	$ 3,240
T32HL07311-02	Lipid Research	Holman, R. T.	University of Minnesota Minneapolis, MN	$ 14,233
F32HL05859-02	Metabolic and Mechanical Evaluation of Aortic Stenosis	O'Neill, M. J., Jr.	Penn. State U. Med. Ctr. Philadelphia, PA	$ 1,660
F32HL05877-01S1	Cholesterol Metabolism in Megakaryocytes and Platelets	Schick, B. P.	Med. Col. of Pennsylvania Philadelphia, PA	$ 160
F32HL05747-02	Mechanism of Heterogeneous Myocardial Ischemia	Steenbergen, C.	Univ. of Pennsylvania Philadelphia, PA	$ 1,340
F32HL05820-01S1	Twin and Family Studies of Plasma Cholesterol Esters	Warty, V. S.	Indiana Univ.-Purdue Univ. Indianapolis, IN	$ 140
National Institute of Allergy and Infectious Diseases				
F3205415-0251	The Immune Response of the Guinea Pig to Insulin	Schroer, J.	NIAID, NIH Bethesda, MD	$ 1,000
F3205415-03	The Immune Response of the Guinea Pig to Insulin	Schroer, J.	NIAID, NIH Bethesda, MD	$ 10,800
National Institute of Arthritis, Metabolism, and Digestive Diseases				
F32AM06279-01	Regulation of Hepatic Glucose Metabolism	Barrett, E. J.	Yale Univ. Med. School New Haven, CT	$ 15,800
T32AM07247-03	Diabetes, Metabolism, and Endocrinology Training	Bierman, E. L.	Wash. Univ. Med. School Seattle, WA	$ 104,851
F32AM06274-01	Effects of Exercise in Obesity and Diabetes Mellitus	Bogardus, C.	Vermont Univ. Med. Coll. Burlington, VT	$ 16,200
F32AM05923-02	Somatostatin Secretion in Normals and Diabetics	Boldt, K. A.	Washington University Seattle, WA	$ 16,600

FELLOWSHIPS AND TRAINING PROGRAMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
F32AM05943-02	Quantitative Estimation of Insulin Sensitivity	Bowden, C. R.	Northwestern University Evanston, IL	$ 3,800
F32AM06240-01	Muscle Metabolism and Insulin Binding	Brady, L. J.	University Hospital Boston, MA	$ 13,800
T32AM07302-02	Interdisciplinary Studies of Hormone Function	Braverman, L. E.	Mass. Univ. Med. Sch. Worcester, MA	$ 76,426
T32AM07094-05	Training in Diabetes, Endocrine or Metabolic Diseases	Brown, J.	California Univ. Med. Sch. Los Angeles, CA	$ 60,213
F32AM06296-01	Diabetes, Arterial Wall O_2 Supply and Atherosclerosis	Buerk, D. G.	Northwestern University Evanston, IL	$ 13,000
T32AM07260-03	Training Grant in Diabetes and Metabolism	Cahill, G. F., Jr.	Joslin Diabetes Foundation Boston, MA	$ 55,568
T32AM07196-04	Training for Research in Diabetes	Carpenter, A. M.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 49,159
F32AM06154-01	Structure and Regulation of Insulin MRNA	Chan, S. J.	Chicago University Chicago, IL	$ 14,500
F32AM05882-02	Kinetics of Insulin Binding and Glucose Transport	Ciaraldi, T. P.	Colorado Univ. Med. Sch. Denver, CO	$ 13,400
F06TW00429-01	Biochemistry	Clements, R. S.	University of Alabama University, AL	$ 11,315
F06TW00427-01	Muscle Physiology	Costill, D. L.	Ball State University Muncie, IN	$ 16,358
F32AM06123-01	Insulin Sensitivity of Exercise-Trained Muscle	Craig, B. W.	Washington Univ. Med. Sch. St. Louis, MO	$ 16,200
T32AM07061-05	Research Training in Diabetes and Endocrinology	Crofford, O. B.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 77,988
F32AM06043-02	Affinity Labeling of Phosphoenolpyruvate Carboxykinase	Czarnecki, J. J.	Wisconsin University Madison, WI	$ 13,400

FELLOWSHIPS AND TRAINING PROGRAMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
T32AM07120-05	Diabetes and Related Metabolic Diseases	Davghaday, W. H.	Washington Univ. Med. Sch. St. Louis, MO	$ 109,916
F32AM05422-03	Stepwise Degradation and Resynthesis of Insulin	Davis, E. J.	California University Berkeley, CA	$ 13,980
T32AM07052-05	Research Training in Diabetes and Endocrinology	Derubertis, F. R.	Pittsburgh Univ. Med. Sch. Pittsburgh, PA	$ 51,671
T32AM07298-02	Endocrinology, Metabolism, and Diabetes	Di Girolamo, M.	Emory University Med. Sch. Atlanta, GA	$ 70,632
F32AM05955-02	Studies of Adult-Onset Diabetes Mellitus	Donald, P. E.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 13,488
F32AM05873-02	Stimulus-Secretion Coupling of Insulin Secretion	Dudek, R. W.	Northwestern U. Med. Sch. Chicago, IL	$ 13,489
T32AM07328-02	Steroid Hormones; Biochemistry and Molecular Biology	Edelman, I. S.	Col. U. Coll. Phys./Surg. New York, NY	$ 107,739
T32AM07187-04	Diabetes-Insulin Action and Secretion	Fain, J. N.	Brown University Providence, RI	$ 58,287
T32AM07245-03	Training Program in Endocrinology and Metabolism	Fajans, S. S.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 74,268
T32AM07058-05	Diabetes Mellitus and Related Disorders of Metabolism	Felig, P.	Yale University Med. Sch. New Haven, CT	$ 79,265
T32AM07348-01	Research Training in Diabetes and Endocrinology	Field, J. B.	Baylor Coll. of Medicine Houston, TX	$ 67,101
F32AM05662-02S1	Subcellular Localization of Proglucagon Conversion	Fletcher, D. J.	Emory University Med. Sch. Atlanta, GA	$ 2,344
T32AM07307-02	Endocrine and Metabolism Training Grant	Foster, D. W.	Texas Univ. S.W. Med. Sch. Dallas, TX	$ 109,459
F32AM06096-01	The Mechanism of Action of Insulin on Muscle	Frank, H. J.	California Univ. Med. Sch. Los Angeles, CA	$ 16,700
F32AM06316-01	Insulin MRNA Concentrations During Pancreas Development	Frazier, M. L.	Texas Univ. Anderson Hosp. Houston, TX	$ 14,580

FELLOWSHIPS AND TRAINING PROGRAMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
T32AM07169-04	Training Grant in Metabolism	Freinkel, N.	Northwestern University Evanston, IL	$ 67,440
F32AM05542-02	Effect of Growth Hormone and Insulin on Adipose Tissue	Frick, G. P.	Mass. Univ. Med. Sch. Worcester, MA	$ 13,800
F32AM05840-02	Studies on Mode of Action of Glucagon	Ganguli, S.	Children's Hospital Cincinnati, OH	$ 14,200
T32AM07352-01	Diabetes and Metabolism	Gerich, J. E.	Mayo Foundation Rochester, MN	$ 38,527
T32AM07044-02	Experimental Endocrinology and Metabolism	Gill, G. N.	Calif. Univ., San Diego MS La Jolla, CA	$ 50,449
T32AM07147-04	Endocrinology and Metabolism	Gorman, C. A.	Mayo Foundation Rochester, MN	$ 95,945
F32AM06178-01	Islet B Cell Regeneration in Experimental Diabetes	Gorray, K. C.	Wash. Univ. Med. School Seattle, WA	$ 13,000
T32AM07018-05S1	Training Program in Diabetes and Endocrinology	Granner, D. K.	Iowa Univ. Med. Col. Iowa City, IA	$ 1,008
T32AM07018-06	Training Program in Diabetes and Endocrinology	Granner, D. K.	Iowa Univ. Med. Col. Iowa City, IA	$ 118,012
F32AM06147-01	Plasma Catecholamines in Obesity and Diabetes Mellitus	Gustafson, A. B.	Med. Coll. of Wisconsin Milwaukee, WI	$ 16,200
F32AM05834-02	Studies with a Continuous Glucose Monitoring Apparatus	Hadji-Georopoulos	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 16,680
F32AM06286-01	Cerebral Insulin Receptors in Metabolic Homeostasis	Hatfield, J. S.	Wayne St. Univ. Med. Coll. Detroit, MI	$ 13,000
T32AM07312-02	Postdoctoral Research Training in Endocrinology	Hedge, G. A.	W. Virginia U. Med. Sch. Morgantown, WV	$ 55,756
F32AM06118-01	Glucose Modulation of Islet Cell Secretion	Hollander, P.	Washington Univ. Med. Sch. Seattle, WA	$ 17,000
F32AM05668-03	Renal Adaptation to Diabetic Ketoacidosis	Hughey, R. P.	Pittsburgh Univ. Med. Sch. Pittsburgh, PA	$ 14,500
F32AM05736-02	Hormonal Regulation in the Control of Secretory Process	Iwanij, V.	Yale Univ. Med. School New Haven, CT	$ 11,400

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
F32AM06066-02	Glucagon Sensitive Adenyl-cyclase Components	Iyengar, S. V.	Baylor Coll. of Med. Houston, TX	$ 14,200
T32AM07296-02	Cell Biologic Approaches to Diabetes Research	Jarett, L.	Washington Univ. Med. Sch. St. Louis, MO	$ 90,121
F32AM05843-01A1X1	Glycogen Synthase and Pyruvate Kinase Phosphatase	Jett, M. F.	Brussels University Brussels, Belgium	$ 1,000
T32AM07293-02	Endocrinology and Metabolism	Johnston, C. C., Jr.	Indiana Univ. Med. Sch. Indianapolis, IN	$ 49,181
F32AM05901-02	Lysosomal Glycosidases and Glycoproteins in Diabetes	Kelley, L.	Vanderbilt U. Med. Sch. Nashville, TN	$ 13,180
F32AM06166-01	Regulation of Somatostatin Secretion	King, L. W.	New England Med. Ctr. Hosp. Boston, MA	$ 15,200
F06TW00424-01	Genetic Control of Sugar Transport in E. Coli	Kleinzeller, A.	Univ. of Pennsylvania Philadelphia, PA	$ 11,269
T32AM07027-03	Graduate Interdisciplinary Program in Endocrinology	Krieger, D. T.	Mt. Sinai Medical School New York, NY	$ 72,326
T32AM07282-02	Diabetes Research Training Program	Lavis, V. R.	Texas Univ. Med. School Houston, TX	$ 74,801
F32AM06235-01	Insulin Effects on Cyclic-AMP Phosphodiesterase	LeBlond, D. J.	Texas Univ. Med. School Houston, TX	$ 13,000
T32AM07012-05	Endocrinology and Diabetes Training Program	Lebovitz, H. E.	Duke University Med. Sch. Durham, NC	$ 32,573
F32AM05613-02	Autonomic Influence on Glucagon and Insulin Dynamics	Lorenz, R. A.	Vanderbilt U. Med. Sch. Nashville, TN	$ 13,067
F32AM06193-01	Prostaglandins in Pancreatic Endocrine Function	MacAdams, M. R.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 15,200
F32AM06136-01	Diabetes Mellitus, Epidemi-ology and Biostatistics	Mahan, C. M.	California University Berkeley, CA	$ 13,800

FELLOWSHIPS AND TRAINING PROGRAMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
F32AM06215-01	Role of Calcium in Insulin Action on Cultured Cells	Malchoff, D. M.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 13,800
T32AM07109-0-5	Endocrine Diabetes and Metabolism Training Program	Margolis, S.	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 76,099
F32AM06152-01	In Vivo Degradation of Insulin	Marsh, J. W.	Chicago University Chicago, IL	$ 13,800
F32AM05862-02	Diabetes, Obesity, and Control of Food Choice	McCall, A. L.	Mass. Inst. of Tech. Cambridge, MA	$ 16,600
F32AM05745-03	Immunity and the Genesis of Diabetes	McLaughlin, J. V.	Florida U. Med. Coll. Gainesville, FL	$ 17,000
T32AM07201-04	Training Program in Endocrine and Metabolic Research	Melby, J. C.	Boston U. Med. Sch. Boston, MA	$ 51,881
F32AM05876-02	Control of Lipogenesis by Insulin and Cyclic-AMP	Meredith, M. J.	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 13,400
T32AM07116-05	Training in Pediatric Endocrinology and Metabolism	Migeon, C. J.	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 47,835
T32AM07346-01	Diabetes, Metabolism and Endocrinology	Mintz, D. H.	Miami Univ. Med. Sch. Coral Gables, FL	$ 19,515
F32AM05994-02	Role of Nadph Oxidase in Early Activities of Insulin	Muchmore, D. B.	Washington U. Med. Sch. Seattle, WA	$ 15,600
F32AM06133-01	Effects of Ammonia on Insulin and Glucagon	Mulloy, A. L.	Illinois U. Med. Coll. Urbana, IL	$ 13,800
T32AM07316-02	Research Training in Endocrinology and Metabolism	Mulrow, P. J.	Medical Coll. of Ohio Toledo, OH	$ 38,812
T32AM07320-02	Research Training in Diabetes and Hormone Action	Murad, F.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 110,684
F32AM05398-02X1	Pancreatic Islet Calcium Metabolism	Naber, S. P.	Harvard Univ. Med. School Boston, MA	$ 3,000
F32AM06302-01	Modulation of Acetyl-COA Carboxylase Activity	Nathan, D. M.	Mass. General Hospital Boston, MA	$ 15,800

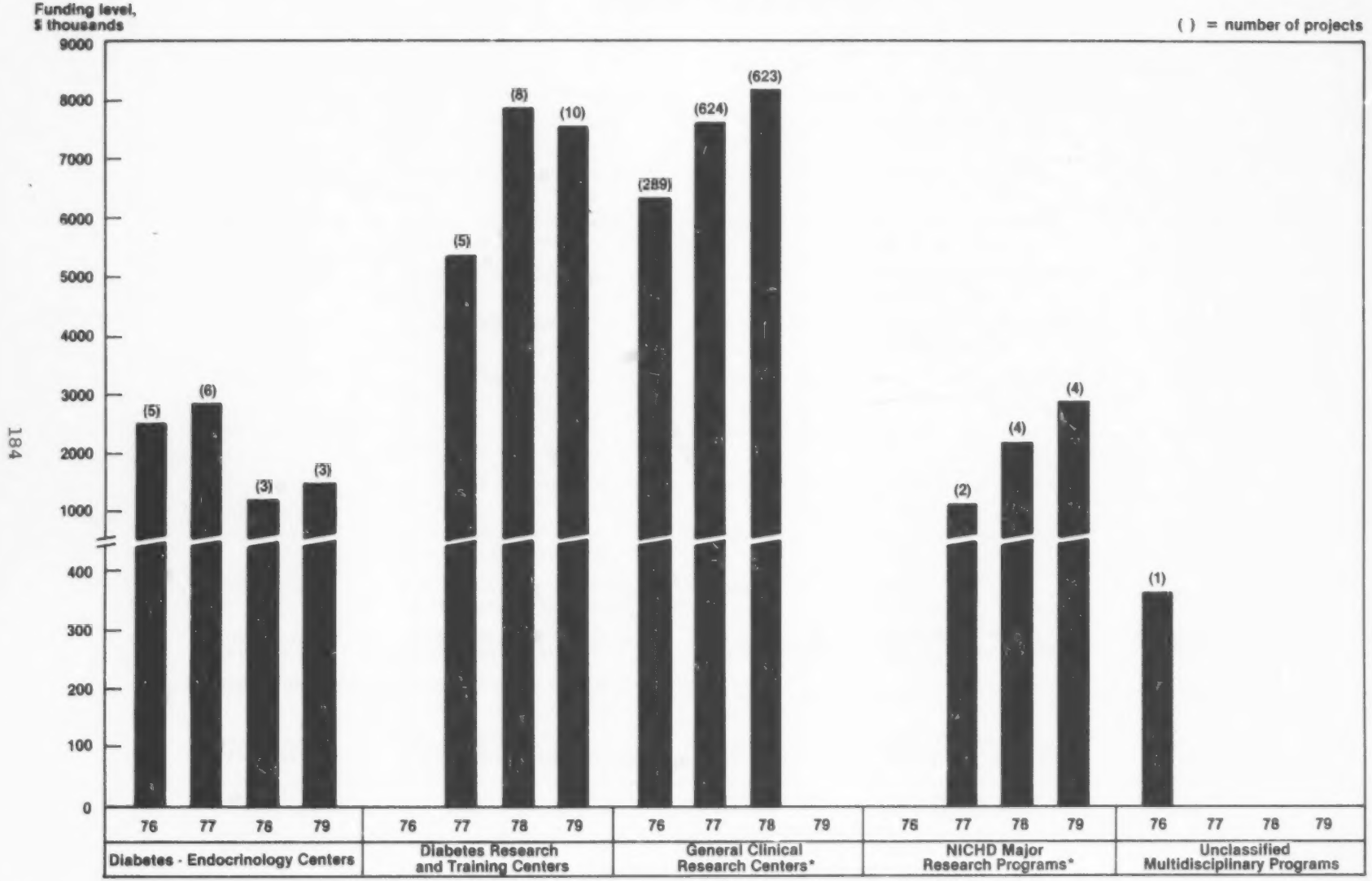
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
F32AM05675-02S1	Role of Cyclic Nucleotides in Islet Hormone Secretion	Noonan, R. A.	Michigan Univ. Med. Sch. Ann Arbor, MI	$ 4,467
T32AM07214-02	Endocrinology and Metabolism	Odell, W. D.	Harbor General Hospital Torrance, CA	$ 58,587
F32AM06190-01	Mechanism of Insulin Resistance	Olansky, L.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 15,200
T32AM07203-03	Training in Diabetes, Endocrinology and Metabolism	Oppenheimer, J. H.	Minnesota Univ. Med. Sch. Minneapolis, MN	$ 58,838
F32AM06164-01	Structure and Transcription of Mammalian Insulin Genes	Perler, F. B.	Harvard Univ. Med. School Boston, MA	$ 13,800
T32AM07337-02	A Training Program in Endocrinology	Perlman, R. L.	Harvard Univ. Med. Sch. Boston, MA	$ 111,868
F32AM06069-02	Insulin Action on Adipocyte Plasma Membrane Proteins	Pilch, P. F.	Brown Univ. Med. School Providence, RI	$ 14,200
F32AM05563-04	Insulin Action on Fat Cell Membranes	Pillion, D. J.	Brown University Providence, RI	$ 7,100
F32AM06259-01	Diabetes and Lactic Acidosis: Pathogenesis and Therapy	Pollock, A. S.	Calif. Univ. Med. Sch. San Francisco, CA	$ 15,800
T32AM07028-05	Training Program in Endocrinology and Metabolism	Potts, J. T.	Mass. General Hospital Boston, MA	$ 120,640
T32AM07290-02	Endocrinology and Metabolism Research Training Program	Raisz, L. G.	Conn. Univ. Med. Sch. Farmington, CT	$ 58,151
F32AM06252-01	Insulin, Diet, and Sympathoadrenal Activity	Rappaport, E. B.	Harvard Univ. Med. School Boston, MA	$ 16,200
T3AM07217-04	Training in Diabetes/Endocrinology/Metabolism	Reaven, G. M.	Stanford Univ. Med. Sch. Stanford, CA	$ 77,000
F32AM05506-03	Biochemistry of 3T3 Cell Differentiation to Adipocytes	Reed, B. C.	Johns Hopkins U. Med. Sch. Baltimore, MD	$ 14,600
T32AM07329-02	Diabetes Mellitus and Metabolic Diseases	Rosen, O. M.	A. Einstein Med. College Bronx, NY	$ 100,567

FELLOWSHIPS AND TRAINING PROGRAMS (Cont'd)

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
F32AM06334-01	Study of Insulin Therapy in Diabetic Dogs	Rupp, W. M.	Minnesota University Minneapolis, MN	$ 13,500
F32AM05895-02	Pharmacologic Prolongation of Pancreatic Allografts	Rynasiewicz, J. J.	Minnesota University Minneapolis, MN	$ 16,600
F32AM06336-01	Insulin Action and Insulin Binding in Diabetes	Simonson, D.	Yale Univ. Med. School New Haven, CT	$ 13,800
T32AM07313-02	Endocrine Research Training Program	Sonenberg, M.	Sloan-Kettering Institute New York, NY	$ 73,732
F06TW00432-01	Diabetes Mellitus	Steffes, M. W.	University of Minnesota Minneapolis, MN	$ 23,417
T32AM07146-05	Graduate Training Grant in Endocrinology	Streeten, D. H.	N. Y. State U. Med. Coll. Syracruse, NY	$ 30,175
F32AM05380-02X2	Regulation of Differentiation of Pancreatic Cells	Thompson, B. J.	Chldrns. Hosp./Med. Ctr. CA	$ 1,500
F32AM05380-03	Fatty Acid Synthesis and Development of Pson BJ	Thompson, B. J.	Chldrns. Hosp./Med. Ctr. CA	$ 7,100
T32AM07129-05	Training Program in Endocrinology and Metabolism	Van Wyk, J. J.	N. C. Univ. Med. Sch. Chapel Hill, NC	$ 92,422
F32AM06311-01	Insulin Action in Diabetic and Nondiabetic Fibroblasts	Vasquez, B.	NIAMDD, NIH Bethesda, MD	$ 11,500
F32AM06244-01	Hepatic Somatomedin Regulation in Diabetes	Vassilopoulou-Sel	Northwestern U. Med. Sch. Chicago, IL	$ 16,200
F32AM06303-01	Mechanism of Insulin Action on Muscle Glucose Transport	Wardzala, L. J.	Inserm-Nice University Nice, France	$ 10,000
F32AM06290-01	Cyclic Nucleotides and Regulation of Insulin Receptors	Whitson, R. H.	Calif. Univ. Med. Sch. Los Angeles, CA	$ 13,000
F32AM05681-03	Feeding Schedule, Insulin and Adrenal Response to ACTH	Wilkinson, C. W.	Calif. Univ. Med. Sch. San Francisco, CA	$ 13,800
F32AM05460-03	Studies on Pancreatic Beta Cells in Tissue Culture	Wilson, G. L.	Vermont University Burlington, VT	$ 14,500

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
T32AM07092-05	Investigative Endocrinology and Metabolism	Young, D. A.	Rochester U. Med. Sch. Rochester, NY	$ 34,814
National Institute of Child Health and Human Development				
F340677702	Vitamin B6 and Tryptophan Metabolism in Pregnancy	Williams, S. A.	University of Alabama Birmingham, AL	$ 12,600

Multidisciplinary Programs (E 1-4)



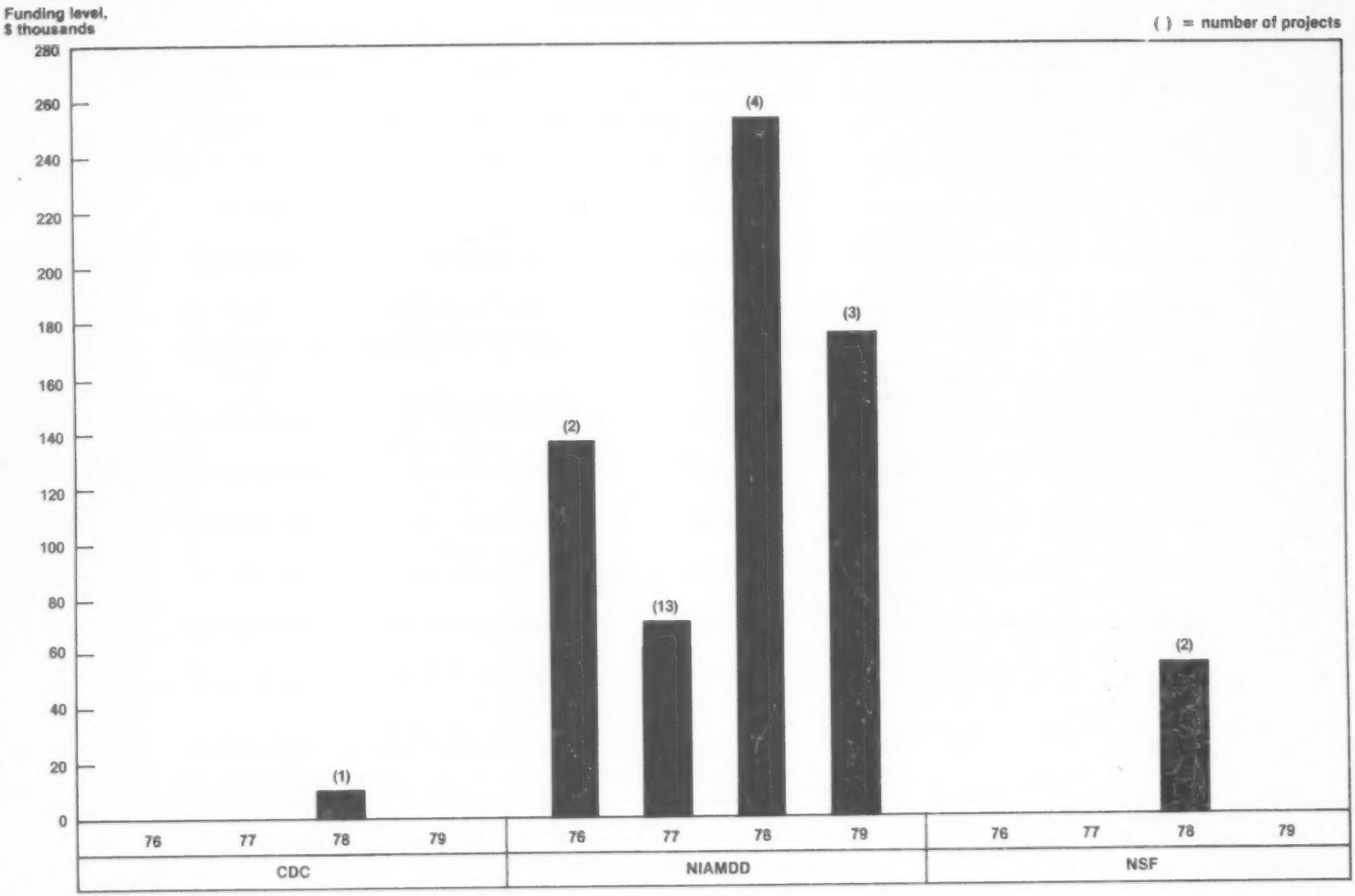
*GCRC and NICHD projects and funds for FY 1977 and FY 1978 have been distributed and added into totals for appropriate subtopics in the "Research" category (B).

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Arthritis, Metabolism, and Digestive Diseases				
N01AM92222	Services for Diabetes Mellitus Coordinating Committee	Ambrose, R.	Analysis Group Inc. Washington, DC	$ 98,013
P60AM20530-02	Diabetes Research and Training Center	Cahill, G. F., Jr.	Joslin Diabetes Fdn., Inc. Boston, MA	$1,118,461
P60AM20542-03	Diabetes Research and Training Center	Clark, C. M., Jr.	Indiana Univ. Med. Sch. Indianapolis, IN	$ 621,983
P60AM20593-02	Diabetes Research and Training Center at Vanderbilt	Crofford, O. B.	Vanderbilt Univ. Med. Sch. Nashville, TN	$ 690,491
P60AM20579-03	Diabetes Research and Training Center	Daughaday, W. H.	Washington Univ. Med. Sch. St. Louis, MO	$1,346,819
P60AM20572-03	Diabetes Research and Training Center	Fajans, S. S.	Univ. of Michigan Med. Sch. Ann Arbor, MI	$1,218,399
P60AM20572-03S1	Diabetes Research and Training Center	Fajans, S. S.	Univ. of Michigan Med. Sch. Ann Arbor, MI	$ 20,029
P60AM20541-03	Diabetes Research and Training Center	Fleischer, N. S.	A. Einstein Med. Coll. Bronx, NY	$ 896,007
P30AM25295-01	Core Center: Diabetes and Endocrinology	Granner, D. K.	Iowa Univ. Med. Coll. Iowa City, IA	$ 515,965
P60AM22125-02	Diabetes Research and Training Center	Larner, J.	Virginia Univ. Med. Sch. Charlottesville, VA	$ 634,222
P30AM17047-05	Diabetes-Endocrinology Research Center	Porte, D., Jr.	Washington Univ. Med. Sch. Seattle, WA	$ 368,593
P60AM20595-02S1	Diabetes Research and Training Center	Rubenstein, A. H.	M. Reese Hosp./Med. Ctr. Chicago, IL	$ 34,312
P60AM20595-03	Diabetes Research and Training Center	Rubenstein, A. H.	Chicago Med. Sch. Chicago, IL	$ 959,774
P30AM19525-03	Support for Diabetes Center	Winegard, A. I.	Penn. Univ. Med. Sch. Philadelphia, PA	$ 621,164

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Child Health and Human Development				
P501132702001	Diabetes and Congenital Defects in Pima Indians	Aase, J.	Univ. of New Mexico Albuquerque, NM	$ 74,087
P501108903001	Metabolism	Adam, P. J.	Case Western Reserve Univ. Cleveland, OH	$ 129,236
P501102103003	Fetus and Neonate	Boehm, J. J.	Northwestern University Chicago, IL	$ 230,941
P501132702003	Mechanisms of Hyperglycemia in Premature Infants	Burstein, R.	Univ. of New Mexico Albuquerque, NM	$ 74,086
P501134302006	Bilirubin and Fatty Acids in IDM	Cashore, W.	Brown University Providence, RI	$ 67,889
P501134302001	Kinetic Studies of Glucose Homeostasis	Cowett, R.	Brown University Providence, RI	$ 67,890
P501134302004	Tissue Insulin Sensitivity	Czech, M.	Brown University Providence, RI	$ 67,890
P501108903009	Fetoplacental Steroid Metabolism	Danish, R.	Case Western Reserve Univ. Cleveland, OH	$ 129,236
P501102103002	Obstetrical Considerations	Depp, R.	Northwestern University Chicago, IL	$ 230,941
P501108903008	Fetal Electrophysiology	Dierker, L.	Case Western Reserve Univ. Cleveland, OH	$ 129,236
P501132702005	Microelectronic Pump and Control of Diabetes Mellitus	Eaton, R. P.	Univ. of New Mexico Albuquerque, NM	$ 74,086
P501102103004	Long Range Follow-Up: The Mother and Offspring	Green, O.	Northwestern University Chicago, IL	$ 230,941
P501132702006	Physiologic Significance of Insulin Degradation	Greenberg, R. E.	Univ. of New Mexico Albuquerque, NM	$ 71,086
P501102103010	Psychological Follow-Up of the Offspring	Hatcher, R.	Northwestern University Chicago, IL	$ 230,940
P501132702002	Maturation of Pancreatic Somatostatin Secretion	Kaufman, E. D.	Univ. of New Mexico Albuquerque, NM	$ 71,057

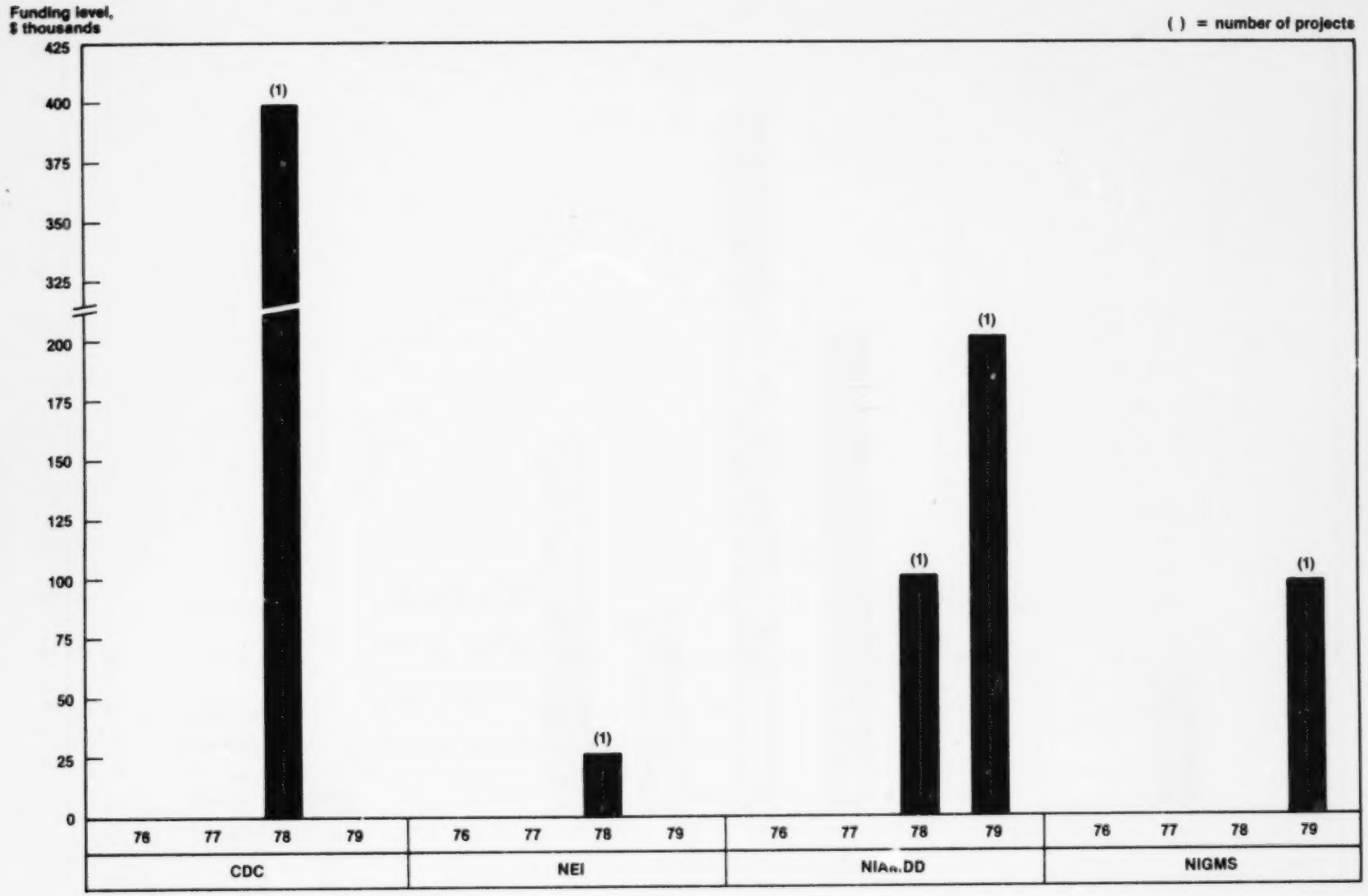
PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
P501134302003	Insulin Secretion Rate in the Fetal Lamb	Oh, W.	Brown University Providence, RI	$ 67,890
P501134302007	Metabolism of Nucleotide Precursors in Erythrocytes	Parks, R. E.	Brown University Providence, RI	$ 67,889
P501102103001	Maternal Metabolism	Phelps, R.	Northwestern University Chicago, IL	$ 230,941
P501134302005	Glycohemoglobin and Diabetes in Pregnancy	Schwartz, R.	Brown University Providence, RI	$ 67,889
P501134302008	The Placenta and Diabetic Pregnancies	Singer, D. B.	Brown University Providence, RI	$ 67,889
P501108903007	Early Identification of Risk for LBW Infants	Sokol, R. J.	Case Western Reserve Univ. Cleveland, OH	$ 129,236
P501134302002	Primary Hyperinsulinemia in the Rhesus Monkey Fetus	Susa, J.	Brown University Providence, RI	$ 67,890
National Institute of Neurological and Communicative Disorders and Stroke				
P50NS08075-10	Laboratory of Peripheral Nerve Morphology (Rats, Mice, Cats)	Asbury, A. K.	Univ. of Pennsylvania Philadelphia, PA	$ 130,162
P50NS14304-02	Mayo Peripheral Neuropathy Clinical Research Center	Dyck, P. J.	Mayo Foundation Rochester, MN	$ 132,434

Workshops, Conferences, and Publications (F)



PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Arthritis, Metabolism, and Digestive Diseases				
N01AM70663	Prepare Index of Diabetes-Related Literature	Schoener, W.	Univ. of Minnesota Minneapolis, MN	$ 133,875
R13AM26182-01	10th Congress International Diabetes Federation	Whitehouse, F. W.	American Diabetes Assn. New York, NY	$ 26,250
R13AM26774-01	Workshop Conference on Gestational Diabetes	Whitehouse, F. W.	American Diabetes Assn. New York, NY	$ 15,000

best copy available


Funding level,
$ thousands
( ) = number of projects
425
400
375
350
325
200
175
150
125
100
75
50
25
0
(1)
(1)
(1)
(1)
(1)
76
77
78
79
CDC
NEI
NIAn.DD
NIGMS

PROJECT NUMBER	TITLE	INVESTIGATOR	LOCATION	FUNDING
National Institute of Arthritis, Metabolism, and Digestive Diseases				
R09AM25635-02	Scientific Evaluation Grant--Dem Cluster	Smith, J. G.	Georgia Medical College Augusta, GA	$ 200,000
National Institute of General Medical Sciences				
GM10402	Research in Zoophysiology in Alaska	West, G. C.	University of Alaska Fairbanks, AK	$ 99,124

Discrimination Prohibited: Under provisions of applicable public laws enacted by Congress since 1964, no person in the United States shall, on the ground of race, color, national origin, sex, or handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. In addition, Executive Order 11141 prohibits discrimination on the basis of age by contractors and subcontractors in the performance of Federal contracts. Therefore, the National Institute of Arthritis, Metabolism, and Digestive Diseases must be operated in compliance with those laws and executive order.

best copy available

NIH Publication No. 80-2244
September 1980